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Classical Montessori: A Study of the Classical Rhetorical Canons in Early Montessori Writing Instruction

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CLASSICAL MONTESSORI: A STUDY OF THE CLASSICAL RHETORICAL CANONS IN EARLY MONTESSORI WRITING INSTRUCTION

by

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ABSTRACT

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This thesis begins by proposing that all five classical canons are an ideal theory for guiding any writing pedagogy. The majority of the thesis, then, details how Montessori writing instruction synergistically exploits these canons to create a powerful pedagogy. Devised by Maria Montessori in the late 1800s, her instruction displays standard and nonstandard applications of invention, arrangement, style, memory, and delivery. Because Montessori writing instruction begins in preschool, this thesis concludes with an exploration of the potential benefits of introducing a classical curriculum before college.

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INTRODUCTION

THE CLASSICAL CANONS: THEIR VALUE AS A PEDAGOGICAL GUIDE

According to Kathleen Welch, a noted contemporary composition scholar, "classical rhetoric is the most complete critical system ever devised for the production and analysis of discourse"("Classical" 3). Devised for an oral culture more than 2,500 years ago, classical rhetoric provided orators with a powerful means of persuasion (Jarratt xv). Refined by Platonic philosophy (Hamilton 7-18) and augmented by Aristotelian logic (Kennedy 4-5, 9), classical rhetoric became a system of five interworking canons: invention, arrangement, style, memory, and delivery (Crowley 29).

For the orator, invention issues included the formulation and argumentation of a thesis; the establishment of personal credibility; and the determination of an audience's identity, needs, and motivations. Arrangement involved the logical structuring of information into a specific format. Style focused on clarity derived from the proper use of syntax, appropriate word choices, and the effective use of figures of speech. Memory involved the memorization, preservation, and retrieval of information, as well as the use of strategies to make language memorable. Delivery embraced issues of voice and gesture, and

emphasized the importance of presenting material as prescribed by a chosen format.

Around 800 BC, with the emergence of the Homeric alphabet, written discourse ensued (Murphy 8). According to Walter Ong, this transition from a period of "primary orality" to a period of "literacy" activated dormant human cognitive abilities (Ong 28-29). With discourse limited to only speech, the human mind was able to construct and experience only a pre-logic consciousness. With discourse broadened by the advent of writing, the human mind became capable of abstract thought.

Today, as the twenty-first century draws closer, a second discourse transition is occurring. Induced by the electronic technology of radio, television, video, film, tape cassette, compact disc, telephone, voice mail, computer, and fax, this third period of "secondary orality," or electronic discourse, is further enhancing cognition. By broadening the realm of discourse, electronics is expanding mental abstraction (Ong 135-36).

As each form of discourse evolves, the impact of each on the others prompts each to change (Welch, "Electrifying" 23, 26-27). For example, while writing gives speech a visual permanence that it lacks as a solitary discourse, electronics, in turn, adds an auditory component to the preservation of writing.

In 800 BC and then again during the twentieth century, the emergence of a new discourse caused a chain reaction. The initial cultural response of user-resistance transitioned to user-acceptance. This, in turn, made each new form of discourse broadly available and eventually a cultural norm. Once integrated into common use, each new discourse changed society's perception of communication.

Speech, writing, and electronic communication display four striking commonalities. First and most basically, they are interrelated forms of discourse. Second, they share a capacity for enhancing cognition. Third, they are so interactive that a change in one causes changes in the others. Finally, the shift from writing to electronics evokes the same repercussions as those experienced during the shift from speech to writing.

These four commonalities make speech, writing, and electronic discourse analogous. As a result, the orality-based precepts of the classical canons are as applicable to writing and electronic discourse as they are to speech (Welch, "Platonic" 6-7).

The way in which one canon effectively relates to all forms of discourse reflects how all the canons achieve a multi-discourse applicability. For example, when applying the principles of delivery, a speaker is attentive to the pitch and modulation of voice as well as the most effective

moments to pound the podium. A writer, in contrast, using pen and paper to compose a letter, uses the form best suited to the type of correspondence intended while maintaining neatness and punctuating correctly. Comparatively, the user of a word processor seeking to publish a scholarly article adheres to MLA requirements but also attends to word processing issues like font, pitch, headers, and footers (Reynolds, "Classical" 104).

Although pertinent in different ways, as illustrated by the application of delivery to speaking, writing, and electronic composing, each canon is equally relevant to all forms of discourse. As a result, this versatility makes the classical canons an effective theoretical core upon which to base any discourse pedagogy. For this reason alone, the canons offer teachers an enduring and demonstratively useful theory for guiding writing instruction. Two additional attributes, however, make the canons not only effective, but ideal.

First, as mutually dependent, interrelated parts of a whole, the five canons provide powerful strategies when used collectively and recursively (Welch, "Platonic" 5-6). When encoders move forward and backward between invention, arrangement, style, memory, and delivery, the canons acquire a synergistic power that is missing from discourse theories that promote linear formulas.

Second, because the canons invite recursiveness, they comply with cognitive process theory. The mental act of writing, recognized by many teachers as a series of stages known as prewriting, drafting, and revising (Connors and Glenn 111), is shown by Flower and Hayes to be a set of recurring subprocesses for which no preset order exists (Connors and Glenn 129-31). This model of writing, as the repeated reactivation of stages, is supported by the recursive nature of the canons.

Despite their applicability to writing and superior attributes, the five canons, as guides for writing instruction, are virtually nonexistent in most educational curricula. This curious absence is most notable in the instructional textbooks used by educators devising writing programs (Welch, "Ideology" 269-72). As noted by Kathleen Welch, "two primary and mostly unacknowledged theories dominate textbooks: 1) a truncated version of the five classical canons, and 2) the modes of discourse--basically description, narration, exposition, and argument" (Welch, "Ideology" 269).

According to Welch, both approaches to writing are inferior. The truncated canons, purged of memory and delivery and presented as invention, arrangement, and style, are divested of the power their interactions emit as a construct of five (Welch, "Platonic" 6). Stripped of memory

and delivery, the remaining canons completely overlook important issues central to audience persuasion (Welch, "Platonic" 6).

While the truncated canons are nullified by reduction, instruction promoting mode-writing is equally harmful. Devised by Alexander Bain in the mid 1800s, mode-writing presents the composing process as the formulaic imitation of a model and written products as the creation of separate genres, each categorically distinct from and nonintegrative with the others (Connors, "Rise" 454).

By presenting descriptive writing, for example, as the imitation of a paragraph extracted from a Hemingway novel, teachers convey many false and harmful notions to students. First, teaching writing as the compartmentalized production of pure genres causes students to believe that description, narration, exposition, and argumentation are types of writing that can never be combined (Welch, "Ideology" 273-74).

Second, asking students to imitate work produced by published authors intimidates many and conveys the idea that only a "gifted few" can write (Welch, "Ideology" 270).

Third, by using prepackaged, ready-to-serve excerpts, students are misled into believing that commendable writing just emerges into being without struggle or angst (Welch, "Ideology" 272, 273).

Fourth, excerpts used as models of exemplary writing reduce writing to a fixed notion of what is "good" and any writing that deviates from this concept is viewed as substandard (Welch, "Ideology" 274). Static models of writing provided for emulation also deprive students of their own language by conveying the attitude that "this syntax is best" (Welch, "Ideology" 274).

Finally, excerpts decontextualize writing (Welch, "Ideology" 273). By plucking sections from a novel for display without inclusion of situation or circumstance, teachers present writing as a detached collection of words floating in space.

If the full-canon approach to writing is as superior as my argument suggests, and writing texts are chock-full of truncated canons and the modes, how is it that reputable theories like process, expressivism, developmentalism, and social constructionism also influence writing instruction today? The answer lies in the table of contents of nearly every writing text (Welch, "Ideology" 272).

Process theory, writing as the recursive mental maneuvering among three stages, serves as the framework for many texts. Within such a framework, invention (the discovery of a topic) becomes prewriting; invention and arrangement (the developing and structuring of a topic) become drafting; and style (accurate spelling, correct

punctuation, and proper grammar) becomes revision. Texts promoting process theory as such: 1) truncate the canons, 2) promote writing as a linear mastery of stages, and 3) revive the mechanical correctness obsession of formalism (Welch, "Ideology" 272-79).

Expressivism commonly makes an appearance early in the table of contents. Acknowledging every writer's need to "find a voice" and attain a level of comfort in writing (Fulkerson 411-12), this theory directs early assignments. Initially, prewriting and writing exercises are Elbowian "freewrites" where writers privately express their thoughts (Elbow, Writing 3-4).

Developmental theory influences the sequence of assignments from the onset. When applied to expressivism, students progress from private, unjudged writing to shared, criterion-based, critiqued writing (Elbow, "Writing" 10). When applied to process theory, students move along the prewriting, drafting, and revision continuum. As students acquire a basic versatility in maneuvering among these stages, a series of progressively more difficult mode-writing assignments are given. Narrative writing transitions to descriptive writing, which evolves into exposition and finally argumentation.

Social construction theory, which proposes that the meaning of language is culturally determined (Connors and

Glenn 139), is evident in the text's discussion of discourse communities. Since the discourse community of the writing classroom is becoming more diverse and the meaning of each person's words is influenced by this diversity, the use of peer-response groups in writing instruction is a growing classroom practice (Connors and Glenn 142-43). By sharing their work with their peers, students become more aware of the multiple ways meaning is construed.

With the notion of "audience awareness" identified as a key component of skilled writing, these texts often digress into discussions of argumentative strategies which, in turn, stress the importance of audience persuasion and inadvertently return to the primary focus of the canons.

By combining the truncated canons with the modes and garnishing this with the latest composition theories, today's writing texts mix axiologies and often cause teachers' theoretical philosophies to be at odds with their classroom practices (Fulkerson 409-10). Encouraging teachers to equally value mechanical correctness, self expression, subject matter, and audience when teaching and judging writing, forces them to either demand an impossible perfection from students or to split their allegiance between two focuses: one consciously and overtly prioritized, the other unconsciously preferred and graded for (Fulkerson 422).

Writing instruction need not be so schizophrenic. Process theory, expressivism, developmentalism, and social constructionism can be integrated with the canons to produce a harmonious and highly effective pedagogy. By using a classical approach and allowing students to move recursively among the five canons as they intermittently brainstorm, draft, and revise, the synergism of a fully interactive system is preserved while process theory is appropriately applied.

The benefits of developmentalism and expressivism are also assimilated when a student's audience is initially the self and the work produced is judged by self-satisfaction. To progress along this continuum, subsequent works can target increasingly more complex and demanding audiences like the student's peer group, the teacher, and finally a larger public forum such as a newspaper or magazine. Because an "audience" axiology guides instruction and grading, teaching philosophy and classroom practice remain harmonious.

The social constructionist use of the peer-response group can also work well in a modern classical classroom. Called "dialectic" by Greek rhetors, the peer-response group is a modern version of Plato's use of dialogue and Aristotle's use of debate (Horner, "Dialectic" 11-12). To acquire knowledge and clarify meaning, Plato used a dialogue

of inquiries. To reveal commonly held probable truths, expose falsehoods, and discern the available means of persuasion, Aristotle had opponents face-off and debate a topic.

Writing pedagogies and curricula based on classical rhetoric can make writing instruction productive for teachers and students. I want to argue here that the degree of efficacy achieved, however, may depend on the time of integration. Although introducing a writing program based on the canons at the college level would amend many of the textbook-induced deficiencies of current curricula, earlier integration would allow the beneficial results to be more enduring.

By the time any college student registers for Composition 101, more than likely the preparation obtained over the previous twelve years has consisted of writing instruction conflated with and minimized by literature and grammar. Since few, if any, elementary or high school writing texts based on the canons exist,[1] it is also quite probable that the minimal writing instruction provided has been derived from texts that reduce the canons and promote the modes. Confronted with students indoctrinated by such texts and denied the ample writing practice needed to

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[1] One writing text rooted in the classical tradition is presently available for college instruction. It is Sharon Crowley's Ancient Rhetorics for Contemporary Students.

improve process, classical writing teachers, to be effective, must take on additional tasks that exceed mere instruction. They must reprioritize writing as an indispensable skill, deprogram mental processes founded on errant and misguided information, and hard-sell continuous writing.

Compounding these problems is the dread and aversion many students develop over the years toward writing. Describing writing as "something I never could do," "too time consuming," "boring," and "painful," many students readily admit that they hate writing and avoid it whenever possible. Unfortunately, the current period of renewed or "secondary" orality intensifies this avoidance. With numerous oral communication options available, students prefer to use telephones, answering machines, voice mail, and face-to-face encounters to convey information.

Although these variables challenge a college writing program, they are not insurmountable obstacles. If anything, they are instructive in that they illustrate the prudence of earlier implementation. While a classical writing program could benefit students at any level, a "sooner than later" indoctrination would render the greatest results. It is for this reason and the superiority of the canons as a pedagogical guide that I choose to explore the presence of the classical canons in early Montessori writing

instruction.

Montessori instruction applies the canons in ingenious ways. In a time of educational turmoil when academicians are seeking to implement approaches that work, classically-rooted Montessori writing instruction is extraordinary. As a classical method already in use, Montessori writing instruction can serve as a model for elementary programs and a catalyst for high school curricula in need of change.

CHAPTER I

NON-CLASSICAL THEORIES WITHIN MONTESSORI WRITING INSTRUCTION

The Montessori Method: A Fusion of Theories

Montessori writing instruction derives its effectiveness from its unique integration of classical rhetorical principles with other composition theories. By harmoniously intertwining the canons of invention, arrangement, style, memory, and delivery with the precepts of developmentalism, social constructionism, and Piagetian constructivism, Montessori writing instruction prioritizes classical rhetoric, yet conflates without conflict, into one pedagogy, other secondary theories.

To restrict a discussion of Montessori pedagogy to its classical aspects only and thereby neglect the other theories that, when fused with classical rhetoric, give Montessori writing instruction its synergistic power, would be to commit the same disabling truncation that so often occurs with classical theory. To fully appreciate the classical tradition within Montessori instruction and the efficacy that its fusion with other theories brings, Montessori pedagogy must be disassembled for study so that each theoretical component can be considered for its own merits as well as its contributions as an interrelated part of a whole.

Maria Montessori

The ability to create language is a characteristic that distinguishes humanity from all other species. Consequently, the manner in which language skills are acquired has intrigued many educators for centuries. One such educator, for whom language-learning was a primary focus, was Maria Montessori. The first woman to attain a medical degree in Italy in 1896 (Lillard 1), Montessori devoted her career to the study of early childhood development, the creation of a primary education curriculum, and the implementation of a unique teacher-training program.

From her early interest in pediatrics, Montessori became involved with the plight of mentally-deficient children languishing in Italy's numerous insane asylums. Interacting closely with these children, Montessori became convinced that much of their aberrant behavior and indifference towards learning was due, not to congenital defects but, to sensory deprivation (Kramer 58). To validate this and other conjectures she had regarding the educability of these children, Montessori read numerous works on educational theory and tested her own hypotheses.

Influenced by Itard, Seguin, Pereira, Froebel, Pestalozzi, and Rousseau, as well as the findings of her own experimentation, Montessori devised a sensory-rooted and developmentally-directed method for learning (Kramer 59-67).

Finding that her technique enabled many institutionalized children to learn, she expanded its application to those intellectually impeded by poverty. The successful acquisition of knowledge by this population further motivated her to offer her program to mainstream, non-disadvantaged children. Montessori's most tangible success occurred with this population.

Language, Learning, and the "Absorbent Mind"

From her extensive research of language-skill acquisition in children, Montessori determined that the emergence of language occurs during two formative periods. Notably characteristic of both periods is the child's strong inclination to communicate and heightened state of language receptivity (Montessori, Absorbent 167-68). Calling this language attentiveness "the absorbent mind" (Montessori, Education 17), Montessori pinpointed the times of its occurrence to be between the ages of birth and three, and three and six (Crain 169-70).

In describing the language-acquisition process occurring during these periods, Montessori's depiction closely parallels the act of imprinting in birds (Montessori, Absorbent 112). The intense concentration displayed by children during these phases permits them to form a deep and lasting cognitive imprint of the basic patterns of their language.

Over many years of observation, Montessori never detected a period of conscious and deliberate language receptivity as intense or as significant as that observed during the three to six year interval (Montessori, Education 4-6). During this phase, Montessori noted that children within her learning environment insatiably absorbed experiences associated with speech, writing, and reading. Describing it as an "explosive" period of language-learning (Montessori, Advanced Vol 1 89), Montessori concluded that this abundant and intentional receptivity was a single event in a child's life that was neither recurring nor reproducible (Montessori, Advanced Vol 1 xvi).

Constructionism, Constructivism, and the Prepared Environment

Finding preschool children to be cognitively receptive, pliable, and absorbent, as well as curious and delighted by discovery, Montessori knew that these students were optimally ready for learning. Perceiving children to be the primary agents of their learning, Montessori believed that by interacting with the environment young learners construct their own knowledge (Loeffler 101-02). This prioritization of the child as the initiator of learning (constructivism) and the environment as the resource from which knowledge could be attained (constructionism) resulted in Montessori creating didactic materials that auto-educate. Calling it the "prepared environment" (Montessori, Advanced Vol 1

xvii), Montessori altered the role of the teacher by making the materials the catalyst to learning and the teacher the architect of the learning environment (Loeffler 104).

To attract children to the materials, these items are outwardly intriguing. To hold the children's interest, they are manipulable. Devised to yield a deliberate discovery by evoking curiosity, these items when touched, probed, and explored trigger the learning of a concept. The children's delight from the initial discovery entices them to repeat their activity with the object. This repetition, in turn, stimulates thinking which ultimately induces the construction of knowledge.

One of the earliest composition efforts that a Montessori preschooler undertakes occurs with a material called "the movable alphabet." Used while seated on a floor mat, this device consists of a box with 26 compartments, each containing sets of a different letter of the alphabet. Having previously mastered associating a sound with each letter, the child begins early composing by slowly transforming ideas into words, words into letter sounds, and letter sounds into graphic symbols. For example, the mental image of a fat, black cat typically emerges via the movable alphabet as *the blac kat sat he wuz fat.*

Stimulated by both the feel and the sound of the letters, the child enthusiastically embraces the challenge

of transforming invisible ideas into physical form. Further exuberance for writing comes from the astonishment and delight experienced by the child upon discovering that his or her mental image has been transformed into words comprehendible by all who read.

Sensory Learning and Developmentalism

The acquisition of knowledge is a gradual process. During this period of the "absorbent mind," children are "sensory-centric" in that they rely extensively on their senses to learn from their environment. For knowledge to be made, the senses act as a conduit connecting the learning materials within the classroom to the cognitive processes within the brain (Lillard 71). Designed to be visually, auditorially, and tactually stimulating, Montessori materials captivate the senses and in this way induce exploration, discovery, and the cognitive construction of knowledge.

In addition to recognizing the child's sensory pathway to knowledge, Montessori also appreciated the differing rates at which children construct knowledge. Striving to respect and preserve each child's individuality within the learning process, Montessori devised a developmentally-directed and self-paced curriculum (Montessori, Advanced Vol 1 71).

Within this curriculum, children encounter a series of

learning opportunities which emerge along a continuum beginning with the most simplistic of exercises and advancing to more difficult endeavors (Lillard 61-62). For example, Montessori writing instruction addresses both the physical act as well as the cognitive process of writing. As a result, instruction begins with motor preparation followed by sensory education and, finally, cognitive readying.

Self-Constructed Learning and the Role of the Teacher

In addition to providing a self-paced curriculum, Montessori also introduced an innovative self-selection approach regarding the use of materials in the classroom. Claiming that "the spontaneous development of the child should be accorded perfect liberty" (Montessori, Advanced Vol 1 71), Montessori viewed her students' awareness of their own developmental timetable to be the best gauge for matching materials to individual learning needs (Montessori, Handbook 15-16).

This notion of the child as a central contributor to learning revolutionized the role of both student and teacher in the Montessori classroom. No longer passive consumers of dispensed information, children became active selectors and builders of knowledge. As an adjunct to self-constructed learning and not the authoritative source, the teacher became a specialist in close observation and timed intervention (Montessori, Advanced Vol 1 102).

Within the Montessori classroom, learning materials are situated within easy reach of all children. As three-, four-, and five-year-olds choose materials for study, the teacher unobtrusively observes their activities for evidence of: 1) attentiveness and repetition; 2) frustration and disinterest; 3) mastery and detachment.

When a child is attentive and engaged in repetitive exploration, the teacher regards the material as challenging and the knowledge associated with its use as constructible. Under these conditions, the teacher remains detached from the child's learning experience allowing discovery and self-constructed knowledge to evolve naturally (Montessori, Method 172-73).

When a child handles materials fretfully or recklessly, the teacher views these materials as temporarily unsuitable due to either a premature self-selection or an unreceptive mood. These circumstances necessitate intervention and accordingly the teacher guides the child to more appropriate work (Lillard 67).

When a child spontaneously retreats from a material after exhibiting repeated purposeful manipulation, this suggests construction of knowledge and a preparedness for more advanced work (Montessori, Advanced Vol 1 77). Attentive to this cue, the teacher awaits the child's choice of a new material then spontaneously provides some guidance

regarding the item's purpose and usage (Montessori, Advanced Vol 1 77, 102).

Although Montessori materials auto-educate, the introduction of new items always requires a simple lesson on the most productive way to explore and use the materials. While the proper way to use some materials is self-evident, many materials require a basic explanation for productive exploration, intended discovery, and constructed knowledge to occur (Montessori, Method 108). Guidance in usage does not thwart self-directed thinking but, rather, prepares the child for successful autonomous learning that, in turn, yields competence and confidence.

Self-Corrective Materials and the Treatment of Error

Much in the same way that Montessori materials are devised to promote self-constructed knowledge, they are also designed to provide feedback regarding the accuracy of their use. Constructed to provide discovery and knowledge if manipulated in a specific way, the materials challenge students to find the intended method of use (Montessori, Handbook 69-70).

Aided by a brief lesson from the teacher and much trial-and-error, students self-assess their manipulations and subsequently self-correct. Through this process, students eventually solve the mystery of the material's use and construct knowledge. Because this knowledge is self-made

with limited teacher involvement, children come to regard learning as a self-directed, autonomous event (Montessori, Absorbent 249).

For example, during the child's sensory-motor preparation for writing, a material called "sandpaper letters" is used to expose the child to the differing shapes of cursive letters. By mounting the sandpaper shape of each letter on a smooth board and finger-tracing each shape, the child not only learns letter shapes visually and tactually, but also maximizes the accuracy of this learning by associating the sandpaper surface with accuracy and the smooth surface with error.

Despite Montessori instruction being student-directed, the teacher is an invaluable facilitator of learning. Not only guiding students in equipment use, the teacher also tracks the progress of each child. To assure a child's mastery of the many learning materials within the Montessori classroom, the teacher covertly tracks the error rate associated with each material.

When noting a negligible incidence of error, the teacher knows the child has achieved mastery of a material and is ready for advancement (Montessori, Method 171). In contrast, when observing a low incidence of error, the teacher recognizes the need for continued exposure to the work (Montessori, Discovery 155). When a moderate to high

incidence of error is encountered, the teacher directs the child to a less difficult material to develop readiness (Montessori, Discovery 225).

Informed by her observations,[2] the teacher intervenes and directs student activities accordingly. Teacher awareness of errors is not shared with the children (Lillard 63). The information is used solely as a marker of progress and for assisting children along their individual continuums of development.

While teachers do not alert children of their mistakes, they also do not routinely praise them for their successes (Montessori, Absorbent 244). Montessori regarded criticism and complements as antagonists to self-directed learning. From her perspective, if learning was induced by external stimuli, such as the anticipation of reward or the fear of failure, the child's construction of knowledge became teacher-dependant and nonautonomous, as well as void of any sense of self-responsibility (Montessori, Absorbent 245, 249). Although Montessori teachers do not volunteer praise or corrective commentary, when children actively seek feedback, they respond positively with reinforcement or redirection (Montessori, Absorbent 281).

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[2] Although all Montessori teachers are not female, for the sake of convenience all pronouns referring to teachers will take the female form.

CHAPTER II

THE CLASSICAL COMPONENTS OF MONTESSORI INVENTION

Of the five classical canons (invention, arrangement, style, memory, and delivery), invention has been the most widely developed for the production of discourse. During the ancient classical period, Plato's inventive tool for conveying truth to win the souls of men (Plato, Phaedrus 73) was a dialogue of inquiries called dialectic (Welch, "Platonic" 10). Aristotle's invention techniques for finding "the available means of persuasion" expanded the canon further to include: 1) establishing ethos (credibility), providing logos (a logical argument), evoking pathos (emotion), and presenting evidence; 2) using discourse to reveal the advantages and disadvantages of something, the just and unjust, and issues deserving of praise or blame; and 3) numerous argumentative strategies (Aristotle 36-50).

Today, most writing instructors, including modern classicists, continue to devote considerable attention to the canon of invention. Contemporary tactics include: exploring a subject, narrowing a topic, finding a thesis, identifying an audience, establishing writer credibility, and discovering as well as developing arguments that support and prove the thesis.

In Montessori writing pedagogy, invention methods are

also abundant. Yet, while similar to the past and present classical techniques of finding and developing a topic, Montessori instruction differs from the ancient and modern treatment of the canon in that it addresses not only the cognitive process of writing, but the mechanical act as well.

In addition to considering the physical as well as mental aspects of writing, the core philosophy of the Montessori writing curriculum also contributes another unprecedented component to invention. Underlying all activities involving the mechanics and cognition of writing is the belief that, for both to be enduringly successful and enjoyed, each should be self-invented (Montessori, Discovery 220-22).

Preparation for Self-Invention

Readying a child mechanically and cognitively for self-invented writing is a two-stage process in the Montessori curriculum. Derived from Montessori's own study of the psycho-physiological factors affecting preschool writing, this preparation entails: 1) sensory-motor training, and 2) cognitive education.

Sensory-Motor Training

From her observations of early childhood development, Montessori not only noted a period of heightened language sensitivity in children from the ages of three to six, but

she also discerned that during this period "the hand [became] the prehensile organ of the mind" (Montessori, Absorbent 168). Noting that preschoolers used manual manipulation to more fully comprehend their world, Montessori recognized that young children needed to physically handle materials to validate and reinforce their sensory perceptions. To prepare children for writing, therefore, the Montessori curriculum uses manipulation exercises that add a tactile component to learning.

Recognizing that the preliminaries to writing would likely influence a child's enduring impression of writing, Montessori purposefully designed her approach so that exercises would generate enthusiasm and joy. To do this, her first strategy was to preserve the objective of self-invention by preparing children indirectly (Montessori, Absorbent 173). Rather than identify activities as "learning to write" exercises, she presented them as informal works performed for discovery and delight. Her second strategy was to preserve the voluntary, self-select format of her curriculum by relying on the "fascination" factor inherent in the works as the motivator for participation (Montessori, Discovery 62-63, 103-04). As a final tactic, she rejected the standard writing instruction methods of Seguin practiced in most schools. Avoided, as a result, were grueling sessions of pencil letter-tracing and imitative stroke and

curve drills (Montessori, Discovery 186-93).

To implement these strategies while cultivating the hand-control, hand-eye coordination, and awareness of pencil pressures needed to form letters, Montessori created Metal Inset Work and Sandpaper Letter Tracing (Montessori, Method 271-81).

Metal Insets

The materials that comprise this unusual preparatory device consist of: 1) solid geometric figures, and 2) frames with hollow geometric centers. Thin and flat, the shapes of both the solids and frames include: square, circle, oval, ellipse, quatrefoil, triangle, curvilinear triangle, rectangle, trapezoid, and pentagon.

Each activity performed by children working with metal insets is modeled first by the teacher. Beginning with frame tracing, a metal frame is placed upon a piece of paper which is secured to a tracing board on a table. Before tracing the frame's interior geometric edges, the teacher demonstrates the proper way to position a colored pencil. Holding it between thumb and index finger, she stabilizes it with her third finger. With the pencil poised to trace, she then secures the frame with her other hand. At the "seven o'clock position" (the initiation point of all cursive letters), she traces the frame's shape clockwise (a directional movement much like the left-to-right flow of writing).

Frame tracing is soon followed with shape tracing. With

paper once again placed on a tracing board, a geometric shape is anchored by the nondominant hand while the outline of the figure is traced by the dominant hand from the "seven o'clock" position.

Eventually, shapes produced from frame and figure tracing are colored-in. Challenging the children to remain within the boundaries of the figure, the teacher first encourages the use of zig-zag vertical strokes. Zig-zag horizontal coloring soon follows.

Once children master frame/figure tracing, exhibit an ability to color within boundaries, and display parallel and uniform coloring strokes, they are given complete freedom in the performance of these activities. Subsequently, they pick their own tracing forms (frame or figure), select their favorite pencil colors, and choose the stroke direction they prefer for each figure. These freedoms not only perpetuate interest in the works, but also inspire the children to tackle more difficult challenges.

These advanced activities include: imposing two or more shapes upon one another with different colors and strokes used to fill each; tracing a single shape rotated in two or more directions with different colors and strokes used to fill each; and lighter-to-darker/darker-to-lighter shading variations used within a single shape.

By performing metal inset work, children acquire many

sensory-motor skills. Within a period of several months, they: 1) refine the thumb and index finger pincer movement needed for holding a pencil, 2) develop a visual awareness of precise shape and size, 3) cultivate an aptitude for uniform left-to-right pencil stroking, 4) attain an awareness of varying pencil pressures, 5) sharpen their visual perception of boundaries, and 6) achieve the hand control needed for creating letters (Montessori, Discovery 204-09).

Sandpaper Letter Tracing

As a learning tool unique to Montessori writing instruction, sandpaper letters consist of rough, grainy lower-case cursive letters mounted on smooth colored boards. In using the apparatus, children are guided to say a letter sound, trace the letter with dominant index and middle fingers, then repeat the sound.[3] From a sensory-motor perspective, this unusual union of scripted letters, contrasting textures, and diverse colors within a single learning device necessitates a brief discussion about their purpose.

Montessori's choice to feature cursive writing exclusively and eliminate printing entirely resulted from

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[3] Curiously absent in the Montessori language curriculum is the use of letter names. Montessori considered this information superfluous and, consequently, her method guides children to refer to letters only by their sound.

five observations she noted while studying preschoolers (Bettmann 48). First, from their art, she observed that circular, connected, flowing, and fluid strokes were motions that emerged naturally and effortlessly. Second, she discovered that children made distinctions between cursive forms more readily than between their printed counterparts. Third, while noting that children who read cursive could read print without prior exposure, she discovered that children who read print could not read cursive without preparation. Fourth, with cursive, she observed that confusion between lower case and upper case letters rarely occurred. Fifth, because the period of language sensitivity was short and nonrecurring, she viewed exposure to the handwriting most commonly used throughout life to be the most practical in early instruction.

Montessori's decision to use differing textures as an aid to learning evolved from her recognition that tactile stimulation maximized visual and aural learning (Montessori, Discovery 211-12). By activating three senses instead of two, she found that cursive symbols became cognitively fixed more quickly. The differing textures of rough and smooth also allowed auto-correction (Montessori, Method 276). Finger tracing that deviated from the letter form was immediately detected by the child.

Her use of two colors in the presentation of letters

provided children with a highly memorable sensory cue for differentiating consonants from vowels (Montessori, Handbook 89; Lillard 127-28). Consonants are mounted on smooth red boards, while vowels are displayed on blue.

As Montessori intended, the motor movement of tracing prepares the finger muscles needed for holding a pencil and the extension, flexion, and rotation muscles of the hand needed for making letters (Montessori, Method 262-63). Over time, finger tracing is replaced by stick tracing. Holding a wooden stick in the writing position, children trace the sandpaper letters to further advance muscle development. The end-result of this preparation is an acquired lightness of touch and an ability to create letter shapes with a pencil within a designated space (Montessori, Method 263).

Cognitive Education

In addition to providing the sensory-motor training needed for the mechanical mastery of writing, metal inset work and sandpaper letter tracing provide children with a cognitive foundation for further intellectual work.

Metal Insets

From the tracing of frames and shapes as well as the coloring of figures, children acquire the cognitive ability to recognize that: 1) lines form shapes, 2) shapes have dimensional differences, 3) shapes that are identical are different from shapes that are similar, and 4) shapes can

have contrasts varying from slight to vast (Montessori, Method 273; Montessori, Handbook 70, 109-10).

Sandpaper Letters

Through the process of saying the letter sound, tracing the letter symbol, and repeating the letter sound, children experience three cognitive events. First, the sandpaper roughness of the letters and the tracing movement of the fingers imprint the letter shapes so they are mentally preserved and readily retrievable (Montessori, Discovery 211-12).

Second, through use of the "say-trace-say" process, each letter symbol of the alphabet is found to have its own corresponding sound (Lillard 129). This discovery, in turn, prompts the association of specific sounds with words that have like-sounding beginnings. Because the teacher presents only a few letter sounds initially in an effort to avoid sensory and cognitive overload, the children, themselves, become the catalyst of their own learning (Montessori, Education 5-6). Predictably, a word arises for which no corresponding sound-symbol is known. To solve this dilemma, the children seek the teacher's guidance by asking for the new symbol.

Third, with the same sensory method used to imprint sound symbols, the visual cue of color is similarly used to mentally differentiate consonants from vowels (Lillard 127-

28).

Strengthening the Foundation

To reinforce and advance the sensory-motor and cognitive skills acquired by working with metal insets and sandpaper letters, more difficult variations of the two are introduced by the teacher. Selecting specific activities from the many compiled in her language-learning album,[1] the teacher devises individualized programs for each child.

One activity invites children to select a letter from a group of three and identify its sound, trace its shape, and repeat its sound (Callaway). An alternative version of this exercise has the child experience yet another sensory reinforcement by tracing the letter shape in sand (Bettmann 47). In another activity, the teacher selects a letter, performs the "say-trace-say" sequence, then writes the letter with a pencil on paper. She then invites the child to do the same (Callaway).

The popular group game "I Spy" also fortifies prior

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[1] This unpublished source reveals an interesting Montessori teaching practice. Montessori teachers do not use a standardized instructional text. Instead, they rely on personal guidebooks that they create while undergoing teacher training. Montessori's choice to forego the creation of an authoritarian text resulted from her conviction that, by having teachers create their own classroom guides, three benefits to the teaching process would ensue. In making their guidebooks, teachers would: 1) compare their own teaching philosophy with Montessori's and expose conflicts in need of remedy; 2) discover teaching to be an evolving process of growth through innovation; and 3) personalize the curriculum making it vibrant and dynamic.

learning (Callaway). Seated in a circle, each child secretly picks an object in the room for the others to identify. Only offering the first letter sound of its name as a clue, the group guesses at the identity of the object until either the item is discovered or the group admits defeat.

A final activity that also contributes to the invention of writing is "phonogram sandpaper letters" (Callaway). Mounted on green boards, cursive-letter sandpaper-pairs with corresponding syllable-sounds are presented for "say-trace-say" learning. Fifteen pairs comprise this work (au, ie, ar, ae, sh, ar, er, oa, qu, ch, ai, ue, oa, oy, th) and, in addition to learning the phonogram sounds, the children also experience connected letter tracing. Before complete mastery is ever achieved, however, the knowledge of some phonograms in conjunction with the knowledge of some single letter sounds catapult children into writing.

Actual Self-Invention

Eventually, during this sensitive period, learned sound-symbols and acquired manual motor skills induce "an explosion" into mechanical and cognitive writing. Signs that a child has acquired the skills needed to invent writing include: 1) an ability to transform thought into words; 2) a capability for analyzing the sounds of words; 3) an aptitude for attaching sounds to symbols; 4) an ability to tactually

identify sandpaper letters with closed eyes; 5) a capacity to produce uniform lines that fill-in shapes; and 6) a dexterity that enables letter shapes to be created with a pencil on paper (Montessori, Method 291; Bettmann 40).

While children experiment with metal insets and sandpaper letters to acquire the above skills, they are also shown a device called "the movable alphabet" (Montessori, Method 281-85). For each letter of the alphabet, there exists a corresponding group of plastic, wooden, or cardboard cursive letters. Housed within one of 26 compartments, the assortment of letter groups are contained within a portable box.

To demonstrate the use of this device, the teacher encourages the child to create a word with the letters. A typical opening suggestion is, "Let's make the word 'dog'." Sounding out the first letter of the word, the child chooses the corresponding sound symbol and, while seated on the floor, places it on a lined mat. Subsequent letter sounds are also translated to symbols and placed from left-to-right on the mat. Soon, the word dog appears in cursive writing.

For each child, the moment when preparation and motivation combine to trigger self-invented writing is different. Typically, the event occurs at a time when a child is intent upon independently converting mental images into visual signs.

At first, writing words for the sheer joy of having the ability preoccupies the child. As a result, beginner writing with the movable alphabet often consists of individual, unrelated words. Soon, however, the child realizes that more complex thoughts can also be translated into writing. As a result, words expand into phases, phrases enlarge into sentences, and sentences accumulate into stories.

Eventually, with ongoing use of the movable alphabet, the child expresses sadness over the impermanence of this form of writing. Resistance to disassembling work is often a good indicator that it is time for the child to transition from the movable alphabet to mechanical writing (Lillard 131).

Further Sensory-Motor and Cognitive Learning Tools

With the discovery that inner thoughts can be externalized graphically and given permanence, Montessori children develop an unquenchable enthusiasm for writing. As a result, this zeal motivates them to write words containing consonants and vowels they do not yet know. To assist children in expanding their language skills, the curriculum offers an array of different learning activities. Two such activities, which typify the types of learning opportunities used, include the "phonetic object game" and "two-letter phonograms."

When playing the phonetic object game, the child is

given a box containing small objects whose identities are three-letter words (i.e., pin, cup, dog). After writing the name of one of the objects on a piece of paper, the teacher asks the child to locate the object from the box. As the object and label are matched, the object's name is pronounced by the teacher and then the child. After the teacher has made labels for all the objects and the child has correctly matched them, the child plays the game on subsequent occasions, alone (Lillard 132-33).

A second activity which also relies on objects to assist learning is two-letter phonogram work. To begin the activity, the teacher shows the child an object while introducing a phonogram pair. For example, while displaying a small ship, she tells the child that sometimes when two letters sit together the sound they make as partners is different from the sound they make as single letters. To emphasize this, she pronounces and writes *sh* on a label in green marker and compares that sound to those of the individual letters *s* and *h*. On the same label, she then writes *ip* in yellow marker. Following this, two movable alphabet sets, one in green, the other in yellow, are introduced. Using the green set, she creates *sh*. She then invites the child to think of other words with the sound "sh" in the beginning, middle, and end of the word.

Together, they write these new words using the two movable alphabets (Lillard 133).[5]

The Writing-Before-Reading Sequence

Because Montessori found the translation of thoughts into words, words into sounds, and sounds into signs to be more easily facilitated by preschool children than the abstract interpretation of ideas from graphic symbols, she believed their cognitive readiness to write occurred before their readiness to read (Montessori, Method 267). In addition, Montessori also noted that children who composed sentences reflective of thought, later exhibited a greater ability to read sentences with comprehension (Montessori, Discovery 237-40).

For these reasons, Montessori's preschool language curriculum begins with a writing focus. Yet, because the preparation methods used to teach writing foster a simultaneous development of reading as well, by the time writing with the movable alphabet and the phonetic object game occurs, Montessori children are not only encoding thoughts into words, they are also decoding words into thoughts (Montessori, Method 281).

By using speech to prepare children to write and read,

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[5] Language learning activities similar to the two just described continue throughout the preschool sensitive period. Because the focus of this thesis is primarily on the canons, a comprehensive presentation of the many lessons that assist the emergence of writing is not included.

Montessori intended that both acts become extended forms of language rather than independent, unrelated forms of communication. In presenting writing and reading as derivatives of speech, Montessori hoped both would become equally valued modes of human expression (Montessori, Discovery 253).

Strategies for Finding and Developing Topics

While the Montessori writing curriculum features two aspects of invention (mechanical writing and self-invented cognitive writing) not treated by ancient or modern classicists as components of this canon, it does share the like goal of exploring strategies for finding and developing topics.

With their earliest attempts at composition, preschool writers, like other writers, exhibit a need for assistance in locating subjects and generating material. To assist them, the Montessori curriculum offers many strategies. Two basic sources for finding topics are: 1) the Montessori "Idea Book," and 2) auditory, visual, and tactile stimuli provided by the teacher.

To perpetuate the philosophy of self-directed learning, the Montessori curriculum cultivates creativity and independence by encouraging students to compile an ongoing collection of inspirational writing topics. Amassed mostly from magazines and newspapers, these preschool topics are

actually picture cut-outs or words clipped and pasted into a personal album (Bettmann 49).

A second source for ideas can be the teacher's presentation of paintings, prints, photographs, stories, poems, and artifacts. When the stimuli are primarily visual, as with paintings, prints, and photographs, their notable features are emphasized verbally by the teacher. When the stimuli are entirely auditory, as with stories and poems, mental image-making is encouraged as the works are read. To enhance the appreciation of artifacts, physical manipulation is invited (Bettmann 34).

Once a topic has been chosen, four standard techniques are useful for development: 1) collective story making; 2) picture definition cards; 3) the "Who Am I?" Game; and 4) the Question Game.

When engaged in collective story making, a small group of children orally compose a short story as the teacher records their words. With completion of the story, the teacher reads the first draft to the children and invites oral revision (Bettmann 50). In addition to identifying the merits of revision, this talk-aloud activity also allows children to experience the mental composing processes of others.

The ability to define terms and, in turn, incorporate them into writing is cultivated through the use of picture

definition cards. From the preschooler's earliest encounters with objects of the environment, an awareness of each item's component parts is stressed. For example, in addition to seeing, smelling, and touching a flower, preschoolers also learn about its principal parts. As a result, Montessori children know that a rose is not only delicate and fragrant, but that it is also comprised of petals, stamen, pistil, sepal, and pedicel. This expanded knowledge of common objects becomes evident when preschoolers work with picture definition cards. When the item is known, a detailed description is offered. When the item is unknown, a detailed description is researched and produced (Lillard 134).

Another technique that promotes vivid and accurate description is the "Who Am I?" Game. Through the process of responding to flashcard questions about identities, children hear precise language used to describe things: "My yellow dust lands on the pistil when the wind blows. Who am I?" Having heard the descriptive definition, their task is to identify the mystery item: "pollen." The benefit of this exercise is the child's exposure to skillful description that creates precise and thorough definitions (Bettmann 37).

A final method for topic development is the Question Game. To assist a child in developing material for a specific topic, this game consists of a question box which contains paper slips asking the writer the "who?," "what?,"

"where?," "when?," and "how?" of a topic. By answering all the questions, the children broadly assess their topic and write more thoroughly about it. In addition to producing material, this approach also serves as a valuable revision tool. Used as a checklist, it detects gaps in information (Bettmann 34).

CHAPTER III

THE CLASSICAL COMPONENTS OF MONTESSORI ARRANGEMENT

Most simplistically, the canon of arrangement addresses the structuring or ordering of material. At a more complex level, arrangement becomes a vast array of organizing strategies. For example, when used to structure writing that relies on effective argumentation, arrangement can be an elaborate presentation of many sections: 1) The Opening, to attract the reader's attention; 2) The Background Facts, to briefly relate the specifics of a situation; 3) The Definition of Issues, to define terms; 4) The Thesis, to convey the central idea to be proved; 5) The Proof, to argue and prove the thesis; 6) The Refutation, to rebut opposing arguments; and 7) The Conclusion, to restate the thesis and summarize (Horner, Rhetoric 233).

The canon of arrangement in early Montessori writing instruction focuses on bringing structure to the rudiments of writing. As such, the canon manages the primordial written discourse of children: first words strung together for the first time in basic patterns to make simple meaning. For preschool writing to convey a discernible meaning that also informs, entertains, or persuades, sentences must be composed in accordance with rules of grammar.

In modern classical rhetoric, grammar is considered to

be a component of style (Corbett 382-84, 398-401). This designation occurs because grammar is used to expand and enhance basic sentence patterns. Rather than rely on the simplest syntactical pattern of subject-verb-complement to express an idea, grammar offers numerous other pattern alternatives that strike a better balance between form and content while yielding eloquence. To say, "The cat hunts the bird" is not nearly as expressive as saying, "The sly cat stalks the unsuspecting bird."

How grammar, in Montessori writing instruction, becomes an issue of arrangement and not style is determined by its role in assisting each canon's end-goal. In modern rhetoric, grammar, as a device of style, consists of sentence-level expansion or variation for the attainment of optimal expressiveness. In Montessori preschool writing, grammar, as arrangement, consists of words syntactically structured so that a basic purposeful meaning is achieved. To elaborate further, as a method of yielding effective word choices, grammar is style. As a method of making meaning from a muddle of words, grammar is arrangement.

Because writing in its most neophyte form is the transformation of thoughts into words and the grouping of words into sentences, early Montessori arrangement does not focus on the structuring of the paragraph or the structuring of the essay. Emphasis, instead, is first directed on the

structuring of words within individual sentences and later on the structuring of words within related sentences comprising a paragraph.

For preschoolers to achieve their writing purpose, whether it be to tell about a summer trip, amuse with tales of a favorite pet, or persuade Santa to bring a dollhouse, they must: 1) know the meaning of individual words; 2) recognize the collective meaning of connected discourse; and 3) understand the function of words within the sentence. To achieve these goals, Montessori writing instruction uses reading comprehension activities and word function games (Lillard 134-36).[6]

Upon learning that the Montessori language curriculum requires preschoolers to learn the basic parts of speech, many parents and educators express skepticism that such an approach is happily tolerated by young children and successful in its outcome. In devising as innovative an approach for the study of grammar as the approach used to prepare children for writing, Montessori guaranteed that her preschoolers would not only enjoy learning about the parts of speech, but that they would excel at it as well.

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[6] Once again, Montessori's "fused" approach to reading and writing illustrates how both foster the other. As described earlier, instruction designed for the cultivation of writing also promotes reading. In this relationship of reciprocal support, work in reading comprehension, likewise, assists the writing of lucid connected prose.

After observing many students engaged in grammar-game instruction, Montessori affirmed with great conviction that the preschool period was the beginning of a child's sensitive stage for grammar. In reporting her findings, she said, "Little children take the liveliest interest in grammar and [this] is the right time to put them in touch with it" (Montessori, Absorbent 174).

Fundamental to Montessori's approach to grammar is her insistence that grammar be the study of sentence construction, not sentence dissection. Fully aware of the immense pride that children derive from the act of creating, Montessori reasoned that receptivity to grammar-study would be greatest if the words used to exemplify the parts of speech were generated in the presence of children or by the children themselves (Montessori, Advanced Vol. 2 10).

To assist children in these grammar activities and to instill the central principle that sentences convey meaning when words are ordered in specific ways, Montessori devised a teaching apparatus called the "grammar box" (Callaway).[7] At the preschool level, this device is a box with nine compartments each of which contains a specific symbol for a

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[7] Montessori did not use the term "grammar box," yet because the device she created for teaching grammar consisted of a box, this term naturally emerged among teachers and eventually became a standard designation within Montessori nomenclature.

specific part of speech.[8] Relying, once again, on visual and tactile sensory cues, this apparatus uses color and shape to create a sensorial impression that enhances learning (Bettmann 54).

Each basic part of speech is represented by a color coded cardboard symbol. This emphasis on symbols instead of terminology is preferred because each graphic image makes a visual impression of a part of speech that is easy to recall (Bettmann 54). Symbols representing parts of speech include: the noun by a large, black triangle; the article by a small, light blue triangle; the adjective by a medium sized, dark blue triangle; the conjunction by a pink rectangle; the preposition by a green crescent; the verb by a large, red circle; the adverb by a small, orange circle; the pronoun by a purple isosceles triangle; and the interjection by a gold keyhole.[9]

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[8] As Montessori writing instruction becomes more advanced, so too does the design and function of the grammar box. At the elementary level, instead of merely serving as a receptacle for the nine grammar symbols, the box becomes more specific in its purpose and provides learning opportunities for each of the nine basic parts of speech.

[9] When Montessori first devised her method of teaching the basic grammar principles associated with nine parts of speech, she used color as her only stimuli for conveying a sensory impression. Over time, Montessori educators modified her system of writing words on color coded cards to a system that used color coded symbols. This alteration introduced not only varying shapes as a second visual cue, but also provided a tactile component that intensified the resultant cognitive impression. Instead of writing the sentence,

By combining the use of grammar symbols with an array of stimulating learning activities that focus on individual parts of speech, the Montessori curriculum gives preschoolers (five to five-and-a-half year olds) a fun-filled, memorable introduction to the usually contentious realm of grammar.

Because no standardized lessons exist for the teaching of Montessori language skills and teachers subsequently devise their own, preschool grammar exercises exhibit only the sole constant of conveying the same basic grammar principles. The methods for illustrating these principles differ not only from school to school but also from teacher to teacher. To provide an example of a typical teaching approach, the grammar lessons of one teacher are featured (Callaway).

The Noun Game

Using a concrete setting like a toy farm with animals, people, and buildings, the teacher invites a student to play the noun game. After assembling the pieces to create some semblance of a farm, the teacher asks the child to remove several objects.

As each item is selected, the teacher writes the

The black cat hissed with *The* on a light blue card, *black* on a dark blue card, *cat* on a black card, and *hissed* on a red card, the newer method allowed the sentence to be written on one piece of paper with grammar symbols applied above each word.

identity of the item on a slip of paper. Once each of the written words have been read and identified by the child, the teacher informs him that each word representing each object is called a noun. The definition of a noun is then provided: "Words that name people, places, or things are called nouns."

After providing the definition, the teacher shows the child the large, black, triangle noun symbol.[10] The child is then asked to make columns each consisting of a chosen object, a noun symbol, and the paper slip with the correct identifying word.

The Article Game

This activity requires a collection of varying quantities of items, for example: one small plastic dog, one penny, one earring, one bow, one tack, two rings, two paper clips, three safety pins, three crayons, four marbles, four buttons, and five shells.

To begin this activity, the teacher assembles like items in groups on a table. After explaining to the child that he will be asked to locate different items via a

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[10] Some Montessori teachers do not use formal grammar terms during the preschool period. Choosing, instead, to prioritize the sensory association of words with grammar symbols and grammar symbols with definitions, they regard the inclusion of terminology to be too overwhelming. Since grammar study continues throughout the elementary and middle school years, this delay is viewed as one way of keeping grammar study pleasurably paced.

written message, the teacher requisitions items from groups that contain two or more objects. For example, her first request might be, *a ring*. Upon receiving the ring from the child and returning it to the group, the teacher then writes for, *the ring*. From these groups, the teacher continues to ask for, *a* ____ and *the* ____.

When all requests regarding these groups are exhausted, the teacher then writes for items from the single item groups: *the dog*, *the penny*, *the earring*, *the bow*, and *the tack*. To emphasize the association between the number of items and the article used when referring to "one of many" and "one of one," the teacher explains, "When I have more than one of the same item and I want one of the items, I ask for '**a** shell.' When I have just one item and I want it, I ask for '**the** shell.' Both '**a**' and '**the**' are called articles."

To assess the child's comprehension of the principle and introduce the article's grammar symbol, the teacher asks the child to write several messages to her. After providing the child with the item requested by each message, the teacher has the child place a light blue triangle symbol above each article.

The Adjective Game

This activity requires the use of animals from the farm setting. To perform this activity, the teacher must:

1) place animals of the same species (for example: cows, sheep, horses, ducks, chickens, pigs) in groups; 2) use only same-species groups that have two or more members; and 3) use same-species animals that are slightly different in appearance from one another (for example: a white horse, a black horse, a small horse, a large horse).

Having completed these preparations, the teacher asks the child to identify each species group. Using only those animals familiar to the child, the teacher then explains that she will be asking for different animals by writing messages to the child on slips of paper.

For her first message, she writes: *a horse*. After receiving the animal selected from the group by the child, the teacher confides to the child that the animal she really wants is "a black horse." Using a pair of scissors, the teacher amends her message. Cutting the slip of paper between the words *a* and *horse*, she then writes *black* on another slip of paper and inserts it between the *a* and *horse*.

After continuing this adjective insertion activity with several of the other groups of animals, the teacher introduces the dark blue, triangle symbol for the adjective and defines this part of speech: "An adjective is a word used to describe a noun." To emphasize the concept, she asks the child to apply the correct grammar symbols above each

article, adjective, and noun in the previously written phrases.

To complete this exercise, the teacher invites the child to construct new phrase messages. After writing each phrase on a slip of paper, the child applies the correct grammar symbols above the phrase while the teacher locates the proper animal.

The Conjunction Game

Most commonly used are a plastic red flower, a plastic white flower, and a plastic yellow flower tied together with a ribbon. In addition to these items, five labels are also needed. These include two slips of paper displaying the word *and* and three slips of paper featuring the phrases: *the red flower, the white flower,* and *the yellow flower.*

To begin this activity, the teacher places each flower separately on a table. Beneath each flower, she places the correct identifying phrase. Following this labeling process, the teacher ties the three flowers together with the ribbon. After creating a bouquet, she then reapplies the appropriate phrase labels while also inserting *and* between them.

Directing the child's attention to the new phrase, *the red flower and the white flower and the yellow flower,* the teacher asks, "What word did I use to link the three short phrases into

one long phrase?" After the word "and" is provided by the child, the teacher identifies it as a conjunction and introduces its pink, rectangle grammar symbol. Having now introduced a fourth part of speech, the teacher asks the child to study the new phrase and place the correct grammar symbol above each word while verbally identifying and defining each grammar unit.

To conclude this activity, the teacher mixes the five labels together and asks the child to create a different long phrase. In addition, she also invites the child to create new phrases using articles, adjectives, nouns, and conjunctions.

The Preposition Game

Using the farm setting once again, this activity requires numerous slips of paper for phrase writing. To begin this game, the teacher writes a phrase about some item from the farm using an article, an adjective, and a noun. Typical phrases include: *the black dog, the red rooster,* or *a large pig.*

After writing a phrase, the teacher asks the child to read it aloud and locate the designated object. The teacher then writes another phrase about a specific location on the farm using an article and a noun. These phases commonly consist of: *the hay loft, the silo, the corral,* or *the stable.*

After generating the two phrases, one about an animal

and the other about a location, the teacher physically takes the plastic animal and places it in the specified area. She then asks the child to tell her where the animal is located. For example, after writing *the black dog* and the *hay loft*, the teacher places the black dog in the hay loft and asks the child, "Where did I put the black dog?" When the child responds, "In the hay loft," the teacher writes the word *in* on another slip of paper and places it between the phrases *the black dog* and *the hay loft*.

Having drawn attention to the word *in*, the teacher identifies it as a preposition and explains that this part of speech is a linking word usually connecting a noun phrase (the black dog) with a phrase that gives details about the noun (in the hay loft). In addition to providing this basic definition, the teacher also introduces the green, crescent grammar symbol.

After performing several of the above sequences, the teacher invites the child to create his own phrases with linking prepositions. After writing each phrase, the child is asked to apply the appropriate grammar symbols to each word.

The Verb Game

To begin this activity, which also relies on the farm setting, the teacher writes simple noun phrases for the

child to read so that the objects specified within them can be retrieved. Using phrases like *the rooster, a goat,* and *the tractor,* the teacher's intent in asking the child to read and retrieve is to review the concept of the noun so it can be used as a contrast for teaching the concept of the verb.

During the first read-and-retrieve exercise, to set up the juxtaposition of noun and verb, the child is reminded that his ease in locating the farm items or nouns is due to the fact that they are physical objects.

To introduce the concept of the verb, a different type of read-and-retrieve activity is used. Instead of writing phrases asking for objects, the teacher writes nonsense phrases asking for actions: *the jump, the hap, the gallap.* As soon as the child registers confusion, the teacher affirms the validity of this reaction by admitting that these things cannot be located because *jump, hap,* and *gallap* are not objects. By explaining that these words are verbs that represent actions while *dog, goat,* and *tractor* are nouns that represent objects, a seventh part of speech is presented.

In addition to defining this newest word function, the red circle grammar symbol is also introduced. Finally, to conclude this activity, the teacher inserts a verb in a previously created phrase to construct a sentence. As a result, *the black dog in the hay loft* becomes *the black dog barks in the hay loft.*

To assess the child's comprehension of verb usage and sentence construction, the teacher invites the child to create sentences of his own.

The Adverb Game

To introduce this eighth part of speech, one verb and at least six compatible adverbs are written on separate cards. After arranging the adverb cards in a column, the teacher instructs the child to follow the verb card as she places it before a word in the adverb column. Each time a phrase is created by a verb-adverb pairing, the child is asked to read the words and act out the action described.

In selecting the verb *walk*, for example, the teacher creates an adverb column containing words like: *quickly*, *slowly*, *quietly*, *loudly*, *gracefully*, and *stiffly*. By placing *walk* before *quickly*, she creates the phrase *walk quickly* which she then asks the child to read and perform. Eventually, each adverb is paired with the verb and the action specified by the word pair is deciphered and performed by the child.

After all the verb-adverb phrases have been read and performed, the teacher points to the adverb column and describes the function of this new part of speech by saying, "Words that tell you **how** to perform an action are called adverbs." In addition to introducing the orange circle grammar symbol, the teacher also invites the child to think

of a different verb and corresponding adverbs. He is then encouraged to write them as phrases and to apply the appropriate grammar symbol to each word. To integrate this new part of speech into sentence construction, the child is further urged to write sentences of his own using an adverb and some or all of the previously learned parts of speech.

The Pronoun Game

To initiate this activity, the teacher writes sentences on slips of paper that deliberately omit a needed personal pronoun. Creating groups of linked sentences like, *The girl put on the girl's coat.; The girl was cold.; Because the coat was heavy, the coat kept the girl warm.*, the teacher reads each group aloud drawing attention to the awkward sounding syntax. Following each reading, the teacher says, "These sound funny. Can you think of another way to say the same thing?" As pronouns are offered by the child, the teacher writes them on slips of paper. Placing each pronoun over a noun, the teacher assists the child in determining if the substitutions are grammatically correct.

During this assessment of personal pronouns, the teacher offers a general definition: "A pronoun is a word that takes the place of a noun." In addition, the purple isosceles triangle is introduced as the pronoun's grammar symbol. As nouns in subsequent groups of linked sentences

are replaced with pronouns by the child, the correct grammar symbols are also applied to all the words comprising the sentences.

The Interjection Game

As the final game of the grammar game series, this activity is often a favorite of preschoolers. Quite simply, several sentences containing interjections are written by the teacher on slips of paper. Some examples include: *Ouch, that hurt!; The book is falling. Look out!; Hey, get off that!; Whoops, I dropped your toy!*. As each sentence is read by the child, the teacher asks the child to act out the described reaction.

Following the child's dramatizations, the teacher asks the child to identify the word or words in each sentence that suggest a strong expression of feeling. Calling them interjections, the teacher then introduces the gold keyhole symbol and invites the child to apply the symbol accordingly.

The Scope of Preschool Grammar

As can be discerned from the nine grammar games described, preschool grammar study is an introduction to the basic parts of speech and the construction of the sentence. As such, its ambition is to achieve a modest, fun-filled exposure to grammar terms and functions.

Because of this restrained agenda, the complex

intricacies associated with each part of speech are not presented. This simplification, however, does not mean that each lesson lacks depth. Although not included for the sake of brevity, each of the nine activities discussed also includes additional exercises for expanding the core concepts initially presented. For example, a second activity associated with the article game explores the use of "an" and "a." Likewise, the adjective game has an expanded activity that demonstrates that a single noun can have multiple adjectives.

Although the section on grammar games does not discuss the pace at which concepts are presented, it is important to mention the Montessori teaching practice of "isolation" (Montessori, Discovery 101-02). The fact that the many idiosyncratic rules occurring with each part of speech are learned and retained by young children illustrates how this use of isolation makes a vast amount of information manageable and more easily mastered.

Quite simply, isolation is the restriction of learning to one basic concept which is presented through a method called the Fundamental Lesson. Consisting of three parts, this lesson entails: 1) the teacher demonstrating a concept simply, objectively, and memorably using Montessori materials; 2) the child correctly repeating the teacher's demonstration; and 3) the child creating new ways to use the

material; ideally, exhibiting the ability to interrelate former concepts with the most recent one (Lillard 65-68).[11]

Occurring simultaneously with this study of grammar is the introduction of paragraph story writing. Used not only as a means of encouraging frequent composing, this activity also allows children the opportunity to implement newly learned grammar concepts. During the preschool phase, the focus of paragraph writing is not sentence arrangement within the paragraph but, rather, word arrangement within the sentences that make up the paragraph.

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[11] In the event that step two of the Fundamental Lesson cannot be performed by the child, the teacher postpones a repeat presentation until conditions are more favorable. When performance of step three is inadequate, the teacher encourages the child to continue working with the material.

CHAPTER IV

THE CLASSICAL COMPONENTS OF MONTESSORI STYLE

The canon of style conveys memorable eloquence by balancing four qualities: 1) mechanical correctness; 2) clarity of expression; 3) appropriate word choices; and 4) language made unique by figures of speech (Crowley 189). To integrate these traits into preschool prose, the Montessori writing curriculum concentrates on simple punctuation, invented spelling, vocabulary enrichment, and basic tropes and schemes.

Simple Punctuation

Since grammar in the Montessori curriculum is treated as an issue of arrangement, punctuation becomes the major focus of mechanical correctness in preschool writing. For young writers struggling to make meaning from a collection of words, the knowledge of how to indicate where sentences end and begin is of major importance.

Following the presentation of simple sentence grammar, the use of period punctuation is introduced. To present this lesson, didactic demonstrations are used (Callaway). For example, after writing an unpunctuated simple sentence, the teacher adds the period as she explains the purpose of end punctuation, "When I write a sentence like, *The boy is sad*, I need to show readers where this sentence ends. To do this, I

use a period." She then inserts the period. Using this technique, the teacher writes and punctuates at least ten sentences. When she is finished, the child is invited to do the same.

Other demonstrations presented to preschoolers regarding punctuation include the use of capital letters to begin sentences, the integration of question marks when direct inquiries are made, and the insertion of commas to separate items in a series.

Invented Spelling

Because preschool writing is almost entirely self-expressive, composing practices that invite and support writer-based prose are common in the Montessori curriculum.

One writer-based practice encountered in many Montessori classrooms is the use of invented spelling. Devised privately by each child, invented spelling is the phonetic construction of words (Chomsky 133). By segmenting words into a sequence of sounds and transforming these sounds into letter symbols, Montessori preschoolers express themselves in writing as precisely as they do in speech.

Granted such freedom of expression, beginning writers do not experience the intimidation of having their prose policed for misspellings. Also eliminated is the misery caused by the customary memorization of nonphonetic words. Spared these ordeals at such a highly impressionable time,

preschoolers luxuriate in finding their writer's voice, developing a confidence in their abilities, and forging a strong sense of value about their work.

The end-effect is the emergence of eager and enthusiastic writers who produce highly creative prose and poetry. One child's poetry with the movable alphabet aptly illustrates this:

autm is kool

and culrful

thai raik leavz

and maik konfierz (Bettmann 42)

Equally impressive is a short prose piece by a five year old child: wuns a litl bune hapt a cras my lan and tht bune hapt ruyt in mi haws and I gav tht bune sum milk (Chomsky 135).

Although some educators believe that invented spelling undermines the adoption of conventional spelling, this outcome is not the norm for Montessori children. With reading being a substantial component of the early Montessori curriculum, exposure to correctly spelled words via this medium gradually causes children to self-correct so that spellings conform to the conventional model (Chomsky 135). Continued reading, later combined with lessons on standard spelling principles, assures a full transition in

the early elementary years.

Vocabulary Enrichment

For children to express themselves effectively and convey their intended message, a rich repository of words is needed. To cultivate a sizable store of words and promote continuous growth, vocabulary enrichment is a priority from the first day that a child enters the Montessori curriculum.

Because the preschool period is a time of heightened language receptivity, children display an insatiable desire to learn new words (Montessori, Absorbent 174). To satisfy this need, the Montessori curriculum uses every learning experience as an opportunity for vocabulary expansion.

During instruction described by Montessori as "motor education," the youngest preschoolers (two-and-a-half to three-and-a-half years) engage in exercises of practical life (Montessori, Handbook 52-53). Typical of Montessori's multipurpose approach to all aspects of learning, these exercises not only develop fine and gross motor skills (Montessori, Method 36), but they also cultivate a beginning mastery of the environment (Lillard 70-71) and introduce an abundance of new words (Bettmann 37). Some of the many activities performed to achieve these results include hand washing, buttoning, unbuttoning, zipping, unzipping, lacing, tying, table setting, dusting, polishing, dish washing, dish drying, sweeping, pouring, scraping, cutting, dicing, and

sewing.

To reveal how a single activity becomes a forum for not only developing a muscle and acquiring a skill but also learning new words, the lesson on "zipping" is insightful. When learning to manipulate a zipper, preschoolers also learn the terminology associated with the task. As a result, in addition to learning to thread and slide a zipper, children also learn words such as "foot," "tab," "lock," "edge," "garment," "teeth," "slide," "clasp," "tag," and "stop" (Bettmann 37).

Likewise, the more advanced motor exercises, such as metal inset work, also contain this vocabulary component. In addition to learning the motor skills needed to manipulate a pencil and form cursive letters, children also learn the names of many geometric shapes.

During instruction, called "sensory education," students encounter visual, auditory, and tactile exercises that enhance learning (Montessori, Handbook 65, 71). One such activity introduced to the youngest children involves exercises working with wooden cylinders (Montessori, Handbook 65-66).

Consisting of four different models, each wooden cylinder model contains ten removable cylinders that sit within holes in a wooden base. The cylinders of the first model are of the same height but of decreasing diameters.

The cylinders of the second model decrease in diameter and height. The cylinders of the third model are of the same diameter but of decreasing height. And finally, the cylinders of the fourth model decrease in diameter as they increase in height.

By having students work with individual models in which they remove, mix, and replace the cylinders, they discover "the differences between the qualities of the objects" (Montessori, Handbook 124). In addition to each discovery, "the teacher also fixes the idea of this quality with a word" (Montessori, Handbook 124). As a result, new words added to their vocabulary include: "thick," "thin," "tall," "short," "large," "small," "wide," "narrow," "high," "low," "fat," and "thin."

Older students working with sandpaper letters make similar discoveries about texture and shape. By visualizing and touching the letters, they learn the words: "rough," "smooth," "straight" "curved," and "round."

During Montessori's "cognitive language education" as work continues with the metal insets and sandpaper letters while advancing to include the movable alphabet and grammar box, the focus of the lessons transitions from sensory-motor to intellectual. Using basic concrete concepts as a springboard, these lessons attempt to stimulate simple abstract thinking (Lillard 71-72).

When working with metal insets, for example, the opportunity arises to compare and contrast "the circle" with "the oval." In doing so, the abstract notion of "similar, but different" is encountered. Likewise, when working with the movable alphabet, the concepts of "temporary" versus "permanent" emerge. The regrettable need to disassemble a beloved story created with the movable alphabet poignantly illustrates to Montessori children that stories assembled with plastic letters on the floor are less enduring than works created with paper and pencil. From these activities that elicit abstract thoughts, come a new genre of words: "compare," "contrast," "similar," "different," "temporary," "permanent," "dimension," "vertical," "horizontal," "parallel," and "uniform."

These words and the many others encountered in Montessori's numerous lessons enable preschool children to amass a sizable vocabulary. With such a repository, an inadequate supply of words is not the Montessori child's dilemma. To the contrary, selecting the most appropriate word from a collection of many becomes the challenge.

Basic Tropes and Schemes

A final stylistic stratagem occasionally presented to preschoolers is the use of basic tropes and schemes. Introduced informally through poetry and story readings, these figures of speech are presented, not as specific terms

and precise definitions but, rather, as interesting word arrangements that make writing exciting and unforgettable (Bettmann 35).

The typical method for drawing attention to these devices begins with the reading of a literary work by the teacher to the children. Read in its entirety, the presentation is delivered without interruptions or commentary. Once concluded, discussion of a particular device is initiated by rereading the section of text that best illustrates its application.

For example, when presenting basic tropes, the teacher might begin by introducing a simile word arrangement found in Barbara Juster Esbensen's poem, "Snow Print Two: Hieroglyphics:"

> In the alley
> under the last cold rung
> of the fire escape
> birds are printing
> the new snow
> with a narrow alphabet.
>
> Their scribbled secrets
> tell of lost songs
> and the howling wind
> that claws like a cat.
> These are messages
> from the small dark birds
> to me. (58)

After reading the poem, the teacher would repeat the second stanza containing the simile and offer the comment, "The howling wind that claws like a cat . . . Isn't that an interesting way of describing a wind? What does the speaker

say the wind does?" Having initiated a group discussion with these questions, she would continue to probe this word pattern and conclude with an invitation that the children model it. Later, during private composing, she might remind various children of this lesson with the suggestion that they try the arrangement.

In a similar manner, Carl Sandburg's poem "Fog" can be used to illustrate the effect of personification:

> The fog comes
> on little cat feet.
>
> It sits looking
> over harbor and city
> on silent haunches
> and then moves on. (1752)

To present the power of onomatopoeia, Emily Dickinson's poem, "I like to see it lap the miles," is instructive. Using horse imagery to describe the movement of a train, lines such as: "In horrid---hooting stanza---" and "And neigh like Boanerges" (1108) imitate sound effectively.

Because the preschool period is so sensorial, the schemes commonly presented are those that exploit sound. Early figures consist of alliteration, euphony, and rhyme. To present the musical feel of alliteration, Isaac Bashevis Singer's short story "Zlateh the Goat" contains many first

consonant sound repetitions such as: "The wind whistled, howled, whirled . . ." (31) and "The moon swam in the sky as in a sea" (39). To present the harmonious, pleasing sounds of euphony and rhyme within a single work, Robert Frost's "Stopping by Woods on a Snowy Evening" is ideal. The third stanza is especially pertinent:

> He gives his harness bells a shake
> To ask if there is some mistake.
> The only other sound's the sweep
> Of easy wind and downy flake. (224)

CHAPTER V

THE CLASSICAL COMPONENTS OF MONTESSORI MEMORY

According to Sharon Crowley, also an authority on the classical rhetorical canons, ancient rhetoricians considered memory to be both natural and artificial (222). Natural memory consisted of retained thoughts, revived impressions, and recollected experiences that emerged into consciousness spontaneously. Artificial memory, in contrast, was a mental faculty deliberately cultivated for the storage and retrieval of information, as well as the invention of ideas that could subsequently emerge from this information. Because artificial memory could be manipulated and trained, the ancients made it the principal component of this canon.

Memory as Mnemonics

As a mental construct, artificial memory relied on architectural and acoustic mnemonics for the retention and recall of information (Reynolds, "Memory" 7). Architectural mnemonics involved creating a mental map in which main points and the sequence of their presentation were associated with mental pictures. Devised as directional landmarks, these pictures guided the rhetor in the delivery of a speech. Acoustic mnemonics, in contrast, involved arranging words in rhythmic, euphonic, and repetitive sound patterns that assisted memorization and retrieval.

In her text, Ancient Rhetorics for Contemporary Students, Crowley describes different architectural mnemonics used by ancient rhetors attempting to commit information to memory (224-26). One technique involved associating facts with images of physical things. To remember a person's name, for example, a rhetor might associate the name with a like sounding object. Using this technique today, a modern student tasked with remembering the ancient name, Cebes, might associate the name with a mental image of the sea.

A second technique involved associating facts with images of physical things stored in mentally envisioned places. For example, to memorize arguments addressing the benefits of increased city taxation, a rhetor might associate each argument with landmarks of the city. To remember an argument about the decaying infrastructure, he could envision the crumbling walls, rutted roads, and uncollected trash at the city's entrance. To recall an argument about declining public services, he could picture dying patients at the understaffed hospital, idle students at the poorly equipped school, and thirsty citizens at the city's dry wells. To recollect the argument about inadequate city funds, he could imagine the near empty coffers at the city's bank.

Unlike architectural mnemonics, which relied on the

envisioning of physical things and places, acoustic mnemonics used sound as a memory-aid. Before the emergence of writing, rhetors were highly dependant upon the sound cues of alliteration, assonance, anaphora, epistrophe, euphony, refrains, and rhyme to commit their speeches to memory.

Today, modern mnemonics are mainly architectural strategies that manipulate the spatial management of written words on paper. As such, they assist readers in recalling aspects of a text by placing emphasis on the opening, middle, and closing placement of words in sentences, sentences in paragraphs, and paragraphs in text. In addition, modern mnemonics also consider the effectiveness by which these placements facilitate top-to-bottom and right-to-left reading. Finally, these strategies also stress the best positioning of such things as headings, chapter titles, and references within a text (Reynolds, "Memory" 8).

Memory as Memorableness

While valuable to the process of memorization, acoustic mnemonics also provided a second component to memory. Consisting of tropes and schemes, they made language striking, vivid, and beautiful. Bestowing such eloquence, acoustic mnemonics not only assisted memorization, but as elements of the canon of style, they also made discourse enduringly memorable. Today, acoustic mnemonics or pleasing

word arrangements remain important methods for achieving memorableness in writing.

Memory as Data Repository

In addition to identifying mnemonics and memorableness as issues of memory, ancient classicists also viewed the mind's capacity to function as a storage receptacle to be a third component of memory (Yates 12). By absorbing and imprinting information, memory provided a mental database for the creation of discourse. As such, memory not only contained information for the invention and development of topics, but it also contained the strategies that directed how the information should be: 1) arranged; 2) made eloquent and memorable; 3) engrafted on and retrieved from the mind; and 4) delivered to an audience.

The emergence of writing extended this concept of memory as an internal data repository to include external sources such as books and libraries (Horner, Rhetoric 338). With the advent of electronics, this external form of memory expanded to include cassette tape, CD-ROM, and computer software. Currently, the mental preservation of data and the storage of data externally remain components of modern memory in the classical composition classroom.

Montessori Memory

Today, memory as mnemonics, memorableness, and data repositories continue to be rhetorical features that have

important applicability to writing. While these features are central concerns in the modern classical classroom, they are often neglected or marginalized in nonclassical writing programs (Reynolds, "Memory" 2-3). Because a truncated version of the canons often serves as one of the theories determining the pedagogy of nonclassical instruction, issues regarding invention, arrangement, and style are presented, while features of memory and delivery are not.

Montessori writing instruction is a rare exception to this phenomenon. Relying on all five canons, it not only applies memory in the traditional manner, but also exhibits some interesting alternative treatments.

Montessori Mnemonics

From the discerning manner by which Montessori used mnemonics in her instruction of preschool writing, it is a reasonable conjecture that she encountered and endorsed the central principal of mnemonics as it was described in Rhetorica Ad Herennium. Here, memory, as remembering, was described as perceptual, not intellectual (Allen 52).

Likewise, she probably extended this notion to embrace Aristotle's view that human perception was sensory dependant (McKeon 586-89) since her mnemonic devices for early writing instruction were visual cardboard letters, audible letter sounds, and tactile sandpaper surfaces.

A possible Platonic influence also emerges in that

Plato's principle of "recollected learning" also infuses her didactic materials. As a dialogue of inquiries, this premise about learning is presented by Plato in the Phaedo:

Socrates: "We agree, I take it, that if anyone is to be reminded of a thing, he must have known that thing at some time previously."

Simmias: "Certainly."

Socrates: "Then do we also agree on this point: that whenever knowledge comes to be present in this sort of way, it is recollection? . . . if someone, on seeing a thing, or hearing it, or getting any other sense perception of it, not only recognizes that thing, but also thinks of something else, which is the object not of the same knowledge but of another, . . . we then rightly say that he's been 'reminded' of the object of which he has got the thought?" (21-22)

Aristotle's "laws of association," similar to Plato's principle of "recollected learning," also seems embedded in Montessori pedagogy. In his treatise, On Memory, Aristotle suggests that in a linkage of sensations when one sensation of a group is presented in exclusion of the others, this sensation subsequently evokes the linked second sensation which subsequently evokes the linked third, and so forth (Allen 52-53).

This associative activity of linked mnemonics is the exact process at work in Montessori writing: architectural mnemonics (letter images), acoustic mnemonics (letter sounds), and tactile mnemonics (the feel of letter shapes) are presented for every letter of the alphabet. Having engrafted upon the mind (through repeated exposures) each

letter's visual, auditory, and tactile sensation, preschoolers compose by: 1) transforming ideas into words; 2) separating words into syllable sounds; 3) associating each syllable sound with envisioned letter symbols; 4) associating each letter symbol with the tactile contours of the symbol's shape; and 5) reproducing the linked letter symbol in cursive script.

In addition to codifying an unprecedented tactile mnemonic,[12] Montessori also devised a chromatic model as well. Calling it "color memory," she used color perception as a fourth mnemonic aid to memory (Handbook 86). This use of color to assist the engrafting, retention, and recall of information appears in her coloration of materials introducing consonants, vowels, and parts of speech.

Montessori Memorableness

"Delightful," "impressive," and "hard to forget" are remarks commonly expressed by Montessori teachers and parents when describing preschool writing. The qualities within the writing that prompt this praise are a highly imaginative content, an advanced vocabulary, and a venturous use of simple tropes and schemes. As illustrated below, the combined effect of creative fantasy, humor, selective word choices, and alliteration not only captures a reader's

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[12] Montessori called this "muscular memory" (Method 277).

attention, but also imparts a lingering image:

A lawng tam a go ther wuz a big manshun with gargael gards.

A wich livd in the manshun and she awnlee aperd at nite.

If kidz saw the wich she ternd them in to frendlee fragz.

So if you see enee fragz dont trampl them.

They mite be kidz. (O'Neil)

Montessori Data Repositories

Of the many contributions that Montessori made to early childhood education, one of the most enduring was her creation of terminology that, today, is regarded as distinctly "Montessori." One term particularly relevant to memory is her phrase "the absorbent mind." Believing the mind to be a place where knowledge is self-constructed and stored, Montessori considered it, in the classical sense, to be a data repository.

In addition to this concept of the mind as a locus for data storage, Montessori also used three external sources for the preservation of memory. The first source consists of the teacher who stores the memory of all Montessori lessons and the usage of all Montessori materials within her mind. Endowed with this knowledge and the obligation to introduce inquisitive minds to unknown facts and reacquaint uncertain minds with forgotten facts, the observant teacher watches

for signs of incorrect usage of materials and doubtfulness.

The second source of memory preservation consists of the materials used by the children to construct knowledge. Many times when knowledge lapses are slight and the children are aware of the specific material that presents the forgotten information, manipulation time with the learning device is all that is needed for the children to recapture the lost data.

The third source of memory storage is found within books that all Montessori classrooms make available in designated reading corners. By providing texts for elective reading, the Montessori classroom provides children with instructive models of conventional spelling, punctuation, and proper grammar usage.

Memory as Psychology: A Modern Addition to the Canon

As noted by composition scholar Fred Reynolds, a psychological component of memory has increasingly been promoted, of late, as an additional factor affecting writing (Reynolds, "Memory" 12). This component consists of perceiving memory as: 1) cognitive/neuropsychology (every writer's past writing experiences and previously learned writing strategies stored in long term memory; 2) collective consciousness (a mindset that occurs among discourse-users when a specific discourse is prioritized over others); and 3) collective unconsciousness (innate creativity, conscience

formation, and the preservation of the psychic past within the psychic present).

Of these three aspects of memory as psychology, the collective unconsciousness and, specifically, the preservation of the psychic past within the psychic present has the most relevance for this age group.

Evidence that Montessori considered the psychic past to be a perpetual part of the psychic present is demonstrated by her formulation of a preschool pedagogy founded on the developmental theory of "sensitive periods." Observing that all preschool children experienced two distinct periods of heightened language receptivity, Montessori also noted that these periods: 1) potentiated further language learning; 2) spontaneously occurred only once; and 3) could not be artificially induced.

Heedful of these findings, Montessori devised all her curricula so they exploited the enduring power of the past and worked in tandem with every child's unalterable developmental timetable. As a result, Montessori's preschool writing program predicates present masteries and future successes on past periods of strategic learning. By maximizing the learning potential of sensitive periods and coupling this with the preschooler's natural receptiveness toward writing, Montessori education provides students with the best possible foundation upon which to build a lifetime

of joyful and productive writing.

CHAPTER VI

THE CLASSICAL COMPONENTS OF MONTESSORI DELIVERY

As the fifth and last of the classical canons, delivery considers the final management of nearly completed discourse. Some scholars describe delivery as the "visual presentation," "rhetorical performance," or "extra-textual features" of a discourse, yet Walter Ong's term "words-in-space" offers a more trenchant view of delivery in that it considers the ways the canon's application differs from discourse to discourse (121).

Discourse as Words-in-Space

To understand delivery as it pertains to speech, writing, and electronic text, it is helpful to consider the different ways discourse-users situate words-in-space to achieve the maximum rhetorical effect. Because speech consists of words expressed audibly into open space where the durability of the message is as long as the listener's memory of it, delivery in oral discourse focuses on prolonging the impact of the speaker's words. To achieve this resonance of words-in-space, speakers carefully manipulate: 1) voice modulation, rhythm, pitch, and tone; 2) facial and body gestures; 3) eye contact with the audience; and 4) timing.

When strategizing the manipulation of these devices, a

speaker's attentiveness to the rhetorical situation is paramount. In delivering a final summation in a courtroom, for example, a lawyer attempts to secure a jury's esteem and sympathy by exerting a forthright tone, shifting between a controlled verbal forcefulness and a soft imploring, adopting animated facial and body gestures, establishing eye contact when stressing crucial points, and avoiding tedium.

Manually written discourse, in comparison, consists of concrete word-symbols inscribed onto a physically preservable space. As a tangible text, delivery now becomes a matter of editing. The transition from a rhetorical performance focus to one of manuscript presentation prioritizes the need for: 1) using correct spelling and proper punctuation; 2) choosing grammar appropriate to one's discourse community; 3) creating a legible manuscript with an aesthetically pleasing appearance; and 4) adhering to the style conventions prescribed by the type of writing produced.

To apply these delivery issues, a conscientious manual-writer proofreads for misspellings; scans for incorrect punctuation; hunts for grammar errors; produces a legible script; uses attractive paper; replaces jagged, creased, or stained pages; and follows genre related rules.

With similar word-in-space characteristics, typed discourse requires an observance of the same editing issues

shared by manual writing. Yet, the uniform font and indelible ink of typeface words on white-space paper add some additional considerations. These include: 1) choosing a readable typeface; 2) using white or off-white, 8.5" X 11", bonded paper; and 3) following typeprint format rules for headers, footers, spacing and documentation.

In adhering to these constraints, a writer generally chooses a readable typeface such as Courier, Times Roman, or Century Schoolbook (Connors, "Actio" 68). When selecting paper, 20 to 22 pound bond is best (Connors, "Actio" 72). To comply with the rules governing text format, a writer should use the style sheet that best suits the text's audience, such as AP for journalists, MLA for humanists, and APA for the social sciences.

With electronic text, the behavior of words-in-space changes dramatically, thus altering the features of delivery once again. Because word-processors and computers suspend illuminated words in a black electronic space and permit a vast array of instant editing and formatting maneuvers, sophisticated desktop publishing issues dominate the delivery of this discourse.

Although electronic text must reflect an attentiveness to all the editing features associated with manual and typed writing, users of this medium must also produce a quality of product that is commensurate with the capabilities made

possible by the medium. As a result, if ethos is to be preserved, manuscripts must display a working knowledge of electronic formatting. This management of white space in terms of layout and design requires that a writer effectively manipulate: font, pitch, margins, spacing, line length, page length, paragraph breaks, headings, subheadings, bullets, footnotes, endnotes, right justification, kerning, bolding, centering, and graphics importing.

Clearly, from a "word-in-space" perspective, delivery is different for different discourses. As such, the issues most relevant to Montessori preschool writing are those associated with manual writing. Since preschoolers use invented spelling and are just beginning to learn the rudiments of punctuation and grammar, finished products are not held to an error-free standard. Instead, the focus is on producing a legible manuscript with an aesthetically pleasing appearance. To accomplish this goal, penmanship and some layout and design issues similar to those of electronic formatting become the main features of Montessori delivery.

Penmanship

Joen Bettmann, a Montessori teacher-trainer with the Association Montessori Internationale, aptly conveys the Montessori philosophy regarding penmanship: "Writing should involve the same courtesies as speech. When the child

actually writes words on paper and hands it to someone else, it should be beautiful, as a form of written courtesy" (42).

To improve cursive script, the Montessori teacher devises exercises with the movable alphabet (Callaway). As a first lesson, the child is requested to situate, on a lined mat, all the small case cursive letters that do not extend below the script line. After having selected the letters a, b, c, d, e, h, i, k, l, m, n, o, r, s, t, u, v, w, and x, each becomes the focus of an individual lesson. Displaying each movable alphabet letter on a lined mat as a model, the teacher requests that each letter be copied on lined paper with a pencil. In a similar fashion, letters that extend below the script line are also copied.

Text, White-Space, and Art

Of equal importance to penmanship, is the backdrop upon which the penmanship appears. Regarding an attractive background to be as much an incentive for writing as for reading, the Montessori curriculum promotes an early awareness of layout and design. Factors to be considered when preparing a work include: 1) text length; 2) paper size and color; 3) script-line spacing; 4) the balancing of text with white-space for illustrations; and 5) the setting of margins to accommodate border embellishments.

Depending on the length of the finished text, students

choose quarter-sheet, half-sheet, full-sheet, or longer scrolled paper for presentation of their work. Paper colors vary from white to assorted pastels. In making their color choices, the children choose hues that enhance the topic or message of their writing. Script-line spacing varies from narrow to broad and is determined by the size of the child's best penmanship.

Illustrations are either thematic or designed to emphasize a crucial point. If thematic, their placement usually announces the work. If used for emphasis, their placement occurs either beside or after the related text. Occasionally, border embellishments are used. Their content, also purposeful, can consist of word-banners or miniature sectional sketches that reflect main points or plot progression.

Although encouraged to include art work in their writing, Montessori children are taught that their words must be expressive enough to stand alone. While their pictures can assist a reader's imagination, the art should not be the safety-net that conveys their message when words fail.

CONCLUSION

Over the years, as both a graduate student and a teacher of freshman composition, I have received a steady influx of brochures promoting texts and conferences on college writing instruction. Although I never kept a running tally of the many topics offered, the prevailing focus of the forums always seemed to be "better process and product through pedagogy."

At first, the immense volume of available books and conferences was a comfort. Should my pedagogy need troubleshooting and repair, resources were plentiful. Eventually, however, when their underlying theme continued to implicate the teacher's pedagogy as the college student's greatest foil, I became frustrated. Despite innovative research, theory-based instruction, relevant assignments, constructive assessment, more accurate grading, and a sincere desire to help students, many teachers I spoke with reported negligible gains in student performance.

Unable to separate realistic assessments from alarmist rhetoric, I could only hypothesize about the true cause of the college student's writing woes. Once I taught, however, my experience allowed me to make several deductions: 1) college writers do struggle with an abundance of writing problems; 2) some pedagogical adjustments do help a variety

of these issues; but 3) larger, intractable difficulties prevail because, for many students, the problems are too numerous, complex, and longstanding for pedagogical solutions applied at the college level to resolve.

As a graduate assistant teaching two sections of English composition at an urban university, I noted that my classes exhibited very similar problem-profiles. Close scrutiny of these problems identified two basic types: 1) learning obstacles caused by physiological, cultural, financial, and academic factors; and 2) skill deficiencies distinguished by serious gaps in or misapplications of basic writing knowledge.

From my own personal experience and the corroboration that books, conferences, and conversations with teachers have yielded about student writing, I believe that these specific obstacles and deficiencies represent a typical problem-profile that recurs in many classrooms. To better describe these problems hindering college students and challenging writing teachers, a survey of the profiles I compiled in Tables One and Two is useful.

Table 1

Problem Profile: Part One

Learning Obstacles	Class A	Class B
Physiological	One student had a longstanding attention deficit disorder which was resistant to Ritalin® and responding poorly to a newly implemented drug.	One student experienced a form of dysorthographia which caused much of his spelling to be incorrect due to a transposition of letters. Another student was dyslexic and reported difficulties in reading academic discourse and taking notes.
Cultural	For 3 students, English was a second language. As their primary language, 2 spoke Spanish and 1 spoke Dutch. Three students spoke and wrote in BEV. Of these 6 students, 3 experienced significant difficulty in producing academic discourse.	For 3 students, English was a second language. As a primary language, 1 spoke Spanish, the second spoke Cambodian and the third spoke Chinese. Four students spoke and wrote in BEV. Of these 7 students, 6 experienced great difficulty in producing academic discourse while 1 student refused to expand beyond BEV.
Financial	Of the 25 students in the class, most were enrolled full-time and were working 20-30 hours/week to pay tuition. Spending much of their time either in class or at work, most admitted that time devoted to studying and assignments was negligible. Two students, funded by athletic scholarships, continuously missed class due to competition conflicts.	Of the 25 students in the class, most were enrolled full-time and were working 20-30 hours/week to pay tuition. Spending much of their time either in class or at work, most admitted that time devoted to studying and assignments was negligible.
Academic	Relaxed admission standards allowed 2 students, unable to meet the university's SAT requirements, to be admitted on a probationary basis.	Relaxed admission standards allowed 5 students, unable to meet the university's SAT requirements, to be admitted on a probationary basis.

Table 2

Problem Profile: Part Two

Writing Skill Deficiencies of Class A and Class B In addition to learning obstacles, the profiles also revealed a standard stock of writing skill deficiencies. Because these were characteristic of both classes, only one list is provided.	
Invention	Unfamiliarity with elements of rhetorical situation Limited or no techniques for generating ideas No strategies for generating subject material Limited knowledge of thesis development and support strategies
Arrangement	Unfamiliarity with elements of the introduction Unfamiliarity with elements of the conclusion Limited knowledge of the basic principles of body paragraphs (topic sentence, support sentences, logical development, transitions, key words & phrases) Knowledge limited to the three-part essay with the widespread misconception that a three-part essay is a three-paragraph essay
Style	Excessive misspelling Consistent misuse of the comma, semicolon, colon, apostrophe, & quotation marks Numerous basic grammar errors (i.e. point of view, verb tense, subject-verb agreement, person, number, omissions, faulty logic, sentence fragment, comma splice, fused sentence) Poor clarity of expression caused by limited vocabulary, wordiness, slang, cliches, & passive voice Limited versatility with complex & compound-complex sentences Limited knowledge of tropes & no knowledge of schemes
Memory	No awareness of the value of and the methods for making writing memorable
Delivery	Marked resistance to revising and producing multiple drafts Omitted or inadequate proofreading Limited knowledge of format rules for font, margins, spacing, page length, paragraph breaks, headers & footers Limited awareness of any form of professional style conventions

While pedagogy certainly influences the effectiveness of a student's composing process and resultant final product, I would like to suggest that pedagogical solutions implemented in college cannot counteract the many deterrents impeding student performance. The learning obstacles and immense number of basic skill deficiencies that students bring into the classroom subvert even the soundest instructional methods, assessment techniques, and grading practices. A closer look at these problems reveals the extent of their impact on students and teachers.

Physiologically rooted disabilities obstruct learning by interfering with a student's cognitive decoding and encoding of language. Because early education teachers are becoming more adept in detecting these conditions and the diagnostic tools used to identify them are more accurate, a greater number of children are acquiring the compensatory skills they need to be successful students.

Yet, despite this progress, many afflicted students either receive inadequate intervention or remain undiagnosed and unassisted. Of these individuals, some complete high school with marginal or substandard performances and gain acceptance into colleges with relaxed admission policies.

Whether remediated or not, these students challenge college teachers with their special needs. Successfully adapted students encounter new demands and need additional

tactics. Poorly compensated students struggle and need better strategies. Undiagnosed students require detection and appropriate intervention. With the myriad of language-learning disabilities that require different methods of management, assisting these students is a daunting task.

A second obstacle to learning that presents teachers with further challenges emanates from America's expanding multiculturalism and growing number of students non-fluent in English. As speakers and writers of languages vastly different from English, these students experience phonetic, morphologic, and syntactic problems that require specialized training to correct.

In college writing courses where instruction is provided in English and the primary language of students differs, a variety of TESOL (Teaching English to Speakers of Other Languages) strategies are needed for each student's writing to meet course objectives. Because the corrective measures appropriate for speakers and writers of like-rooted languages do not suffice when assisting speakers and writers of differently rooted languages, teachers encountering students from diverse parts of the world need training in a variety of TESOL approaches.

Students also in need of specialized language assistance are those who speak and write exclusively in BEV (Black English Vernacular). As an ethnic-specific informal

form of English, BEV problems center around vocabulary, syntax, and usage patterns that students find difficult to transform into academic discourse. Although acceptable for some expressive writing assignments, BEV is generally inappropriate for most academic work. Similar to TESOL remedies, the resolution of BEV problems also requires linguistic-based interventions.

A third impediment to learning occurs when students are deprived of class and study time because high tuition costs necessitate that they accept athletic scholarships or work long hours. As funded athletes, students are often required to miss class in order to fulfill sports obligations. With similar financial constraints, employed students find studying time severely limited because full-time class schedules and 20 to 40 hour work-weeks permit little else.

The impact of this sacrificed class and study time on teachers is best described as an evolution of reactions. Regarding these scholastic slights as avoidable, many teachers, at first, respond antagonistically by penalizing students for absences and late submissions. The adversarial student-teacher relationships that ensue, however, soon convince many teachers to consider a more flexible approach. Preferring to be an advocate rather than an adversary, many teachers lighten the work load and reduce their expectations. In the end, both teachers and students become

casualties. Teachers reluctantly underserve students and students learn less.

A final obstruction to learning occurs when academically under-prepared students are mainstreamed with prepared peers. Caused by relaxed admission standards, this practice adversely affects these provisionally admitted students in all aspects of writing instruction. During teacher-centered lectures and class reworks of student text, under-prepared students struggle because the pacing and complexity of the subject matter reflect the achievement level of the more capable students. Similarly, during work in peer-response groups, the broad range and scope of deficits appearing in their writing overwhelm peers so that only superficial feedback, if any, is offered.

In addition to the havoc caused by learning obstacles, skill deficiencies also impede college writing instruction. When degree programs require that students produce competent research papers, argumentative essays, essay exams, reports, reviews, proposals, surveys, critiques, abstracts, and journals; serious deficits in grammar, spelling, punctuation, vocabulary, and sentence/paragraph construction frustrate efforts to move instruction beyond the basics. Without mastery of the fundamentals, the knowledge-base of students is so weak that more complex knowledge cannot be assimilated.

When educators must: 1) teach neuro-psych and language impaired students special compensatory strategies for decoding and encoding English; 2) make allowances for chronic absenteeism and limited study time; 3) assimilate academically under-prepared students into already overloaded classes; and 4) conflate 12 years of writing instruction into one semester, little time remains for teaching the writing skills college students need for academic success.

Obviously, writing teachers cannot continue to meet all these needs and teach college composition too. Yet, to halt this metamorphosis of pedagogy into an advocacy of special-needs, academicians must propose solutions that will allow writing and its instruction to become something more than repeated remediation.

One solution, suggested by this thesis, is earlier implementation of an effective theory-based pedagogy. As demonstrated by the preceding examination of the classical canons at work within Montessori writing instruction, early exposure to such a curriculum affords numerous benefits.

The presence of the classical canons within any curriculum is always advantageous for three reasons. First, as five interrelated parts of one rhetorical theory, the canons provide a comprehensive and collectively synergistic system for the production of written and electronic discourse. Second, as a system that has been in use for

nearly 2,500 years, the applicability of the canons is well established. Third, as a system that readily accommodates mental recursiveness, writer-based prose, self-pacing, and audience awareness, the canons function congenially with process theory, expressivism, developmentalism, and social constructionism.

In addition to these advantages, the canons also provide a thorough system of strategies for the production of all aspects of writing. In the Montessori curriculum, techniques for the self-invention of writing consist of preparatory exercises with sandpaper letters, metal insets, and the movable alphabet. After the emergence of writing, other invention devices include methods for discovering and developing topics.

Arrangement techniques focus on the syntactical structuring of words in the sentence. As such, they consist of sentence construction activities and word function games.

To convey meaning, achieve clarity, and instill a simple eloquence, style strategies concentrate on mastering simple punctuation, encouraging invented spelling, promoting vocabulary enrichment, and integrating basic figures of speech.

Memory devices include imprinting knowledge through the use of visual, auditory, tactile, and chromatic mnemotechnics, achieving memorableness through selective

word and trope/scheme choices, and preserving data by using the teacher, the prepared environment, and books as storage receptacles.

Finally, delivery tactics consider the aesthetics of neat and legible penmanship as well as the layout and design issues of blending text, white-space, and art.

In addition to the advantages provided by the classical component of Montessori writing instruction, four nonclassical benefits are also derived. First, by implementing writing instruction during the period of heightened language receptivity, the maximum potential for learning is accessed and exploited. Second, by using materials that activate the sensory, motor, and cognitive pathways to learning, acquired writing skills are deeply engrafted and durably preserved. Third, by providing materials that trigger the self-construction of knowledge and self-detection of error, autonomous, independent learning is fostered. And fourth, in allowing the learning process to be self-paced, the varying developmental timetables of all students are respected.

Supplementing these immediate advantages are the important long-range benefits provided by early writing instruction. The introduction of writing to curious, receptive, and unbiased children allows language-learning disabilities to be more easily detected and treated because

the negative attitudes that skew diagnosis are not yet acquired.

Likewise, non-native speakers of English and children of BEV-only environments derive a benefit from early exposure in that instruction is provided from the "roots-up." By encountering language first as sounds, then sounds with letter symbols, then letters grouped into words, and finally words arranged into sentences, students receive an essential grounding in the English language.

Finally, early implementation of a classical program eliminates years of atheoretical or truncated instruction and allows children to acquire strong fundamental writing skills. By having young students master basic skills during their most receptive and absorbent language-learning stage, later writing instruction can finally expand beyond the realm of remediation and become a forum for refinement and growth.

As an existing preschool program, Classical-Montessori is a prototype worthy of replication and expansion. As an impetus for change, Classical-Montessori is tangible testimony that early exposure to the canons enhances writing and its instruction.

Classical writing instruction from preschool through high school is an academic subspeciality whose time has come. For graduate students in search of career-defining

projects, the creation of such programs promises not only opportunities for personal professional growth, but also long lasting benefits to the field of Composition Studies. Better process and product through pedagogy can be the credo of writing instruction. To be more than empty rhetoric, however, it must begin early and be theoretically complete, comprehensive, unconflicted, and systematic in its delivery of knowledge to writers of all ages.

WORKS CITED

Allen, Virginia. "The Faculty of Memory." Rhetorical Memory and Delivery. Ed. John Frederick Reynolds. Hillsdale: Lawrence Erlbaum Associates, 1993. 45-63.

Aristotle. On Rhetoric: A Theory of Civic Discourse. Trans. George A. Kennedy. New York: Oxford UP, 1991.

Bettmann, Joen. "Language Unfolding in the Child." The North American Montessori Teachers' Association Journal 17 (1991): 31-56.

Callaway, Jane. "Montessori Language Album." Unpublished personal guidebook created during Montessori Teacher Training, 1991.

Chomsky, Carol. "Writing Before Reading: Eighty Years Later. "Montessori in Contemporary American Culture. Ed. Margaret Howard Loeffler. Portsmouth: Heinemann, 1992. 133-47.

Connors, Robert J. "Actio: A Rhetoric of Written Delivery." Rhetorical Memory and Delivery. Ed. John Frederick Reynolds. Hillsdale: Lawrence Erlbaum Associates, 1993. 65-77.

---. "The Rise and Fall of the Modes of Discourse." College Composition and Communication 32 (1981): 444-55.

Connors, Robert J. and Cheryl Glenn. The St. Martin's Guide to Teaching Writing. New York: St. Martin's, 1992.

Corbett, Edward, P. J. Classical Rhetoric for the Modern Student. New York: Oxford UP, 1990.

Crain, William. "Unity of Thought and Emotion in Montessori's Theory." Montessori in Contemporary American Culture. Ed. Margaret Howard Loeffler. Portsmouth: Heinemann, 1992. 165-81.

Crowley, Sharon. Ancient Rhetorics For Contemporary Students. New York: MacMillan, 1994.

Dickinson, Emily. "I like to see it lap the miles." The Norton Anthology of American Literature. Ed. Nina Baym, et al. New York: Norton, 1989. 1108-09.

Elbow, Peter. "Writing and Audience: A Progression Through Four Levels or Modes." Conference on College Composition and Communication, Boston, 1990.

---. Writing Without Teachers. New York: Oxford UP, 1973.

Esbensen, Barbara Juster. "Snow Print Two: Hieroglyphics." Junior Great Books. Chicago: The Great Books Foundation, 1990. 58.

Frost, Robert. "Stopping By Woods on a Snowy Evening." The Poetry of Robert Frost. Ed. Edward Connery Lathem. New York: Henry Holt, 1975. 224-25.

Fulkerson, Richard. "Composition Theory in the Eighties: Axiological Consensus and Paradigmatic Diversity." College Composition and Communication 41 (1990): 409-

29.

Hamilton, Walter. Introduction. Phaedrus and Letters VII and VIII. By Plato. London: Penguin Books, 1973.

Horner, Winifred Bryan. "Dialectic as Invention: Dialogue in the Writing Center." Focuses 1 (1988): 11-19.

---. Rhetoric in the Classical Tradition. New York: St. Martin's, 1988.

Jarratt, Susan C. Rereading the Sophists: Classical Rhetoric Refigured. Carbondale: Southern Illinois UP, 1991.

Kennedy, George., trans. On Rhetoric. By Aristotle. New York: Oxford UP, 1991.

Kramer, Rita. Maria Montessori. New York: G.P. Putnam's Sons, 1976.

Lillard, Paula Polk. Montessori: A Modern Approach. New York: Schocken Books, 1972.

Loeffler, Maragret Howard. "Montessori and Constructivism." Montessori in Contemporary American Culture. Ed. Margaret Howard Loeffler. Portsmouth: Heinemann, 1992. 101-13.

McKeon, Richard, ed. and trans. The Basic Works of Aristotle. New York: Random, 1941.

Montessori, Maria. The Absorbent Mind. New York: Dell, 1967.

---. The Advanced Montessori Method: Volume 1. New York:

Schocken Books, 1965.

---. The Advanced Montessori Method: Volume 2. New York: Schocken Books, 1965.

---. The Discovery of the Child. New York: Ballantine Books, 1967.

---. Dr. Montessori's Own Handbook. New York: Schocken Books, 1965.

---. The Montessori Method. New York: Schocken Books, 1964.

Murphy, James J., ed. A Short History of Writing Instruction: From Ancient Greece to Twentieth-Century America. Davis: Hermagoras Press, 1990.

O'Neil, Brendan M. Unpublished short story, 1992.

Ong, Walter J. Orality and Literacy: The Technologizing of the Word. New York: Methuen, 1982.

Plato. Phaedo. Trans. David Gallop. Oxford: Oxford UP, 1993.

---. Phaedrus and the Seventh and Eighth Letters. Trans. William Hamilton. London: Penguin Books, 1973.

Reynolds, John Frederick. "Classical Rhetoric and Computer-Assisted Composition: Extra-Textual Features as Delivery." Computer-Assisted Composition Journal 3 (1989): 104.

---. "Memory Issues in Composition Studies." Rhetorical Memory and Delivery. Ed. John Frederick Reynolds.

Hillsdale: Lawrence Erlbaum Associates, 1993. 1-15.

Sandburg, Carl. "Fog." The Norton Anthology of American Literature. Ed. Nina Baym, et al. New York: Norton, 1989. 1752.

Singer, Isaac Bashevis. "Zlateh the Goat." Junior Great Books. Chicago: The Great Books Foundation, 1990. 23-42.

Welch, Kathleen E. "Classical Rhetoric and Contemporary Writing Pedagogy: Orality, Literacy, and the Historicizing of Composition." Conference on College Composition and Communication, St. Louis, Mar. 1988.

---. "Electrifying Classical Rhetoric: Ancient Media, Modern Technology, and Contemporary Composition." Journal of Advanced Composition 10 (1990): 22-38.

---. "Ideology and Freshman Textbook Production: The Place of Theory in Writing Pedagogy." College Composition and Communication 38 (1987): 269-82.

---. "The Platonic Paradox: Plato's Rhetoric in Contemporary Rhetoric and Composition Studies." Written Communication 5 (1988): 3-21.

Yates, Frances. The Art of Memory. Chicago: U of Chicago P, 1966.

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